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VOLUME VII

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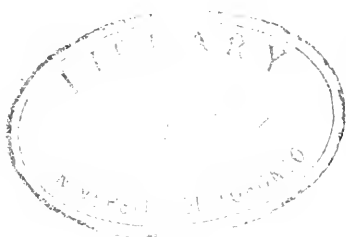
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No. 1

THEORETICAL ISSUES IN THE SINGLE TAX

The temper and point of view of the following discussion will perhaps be made clearer if I set out with a confession of faith:

I believe that the principle at the heart of the single tax agitation—that the fiscal revenues should be derived from the social estates (the regalia principle in ultimate essence), from sources to which the justifications for private property do not attach—is right and vastly important. The rents of mines, forests, waterfalls, franchises, town lots, and also, if practicable, of agricultural lands, should be retained as fiscal properties. Not a society single-taxed, but a society free from all taxes of any sort, is the logic of the principle—a goal well within the reach of a wise and provident public policy. One needs in this connection to recall only the school land properties of the West, the mining wealth set aside for the University of Minnesota, the immense areas of prospective agricultural land forming the endowment of the University of Texas, the salt mines publicly owned in Germany, the royalties which Canada is collecting from very considerable portions of its mineral wealth. As ethical basis, whatever other bases there may conceivably be for private property, the single taxer logically finds nothing but the right of the individual to himself and to the results of his activity—the simple recognition of the meaning of personality and of the ethical relations which it prescribes. That one has produced an item of wealth, or has it by the voluntary transfer of some one that has produced it, affords the sole ethical claim to it. This is doubtless a labor theory of the ethical right of property. Nothing, therefore, which is natural bounty can rightly have been allowed to serve as a source of individual income, to fall into the category of individual ownership.

I believe also that all times have been propitious times, the present a right time no less than any earlier time, for establishing the provision that future increments of earning power from natural resources shall not be permitted to fall into the hands of private owners.

But I don't know what course is now wise in repair of the

blunders that are past. Confiscation, at any rate, a program which shall impose on any casual present owner of original natural bounty the penalty for a general and institutional blunder, appears to me to be an incredibly unethical position for a school of thinkers whose essential doctrine is one of practical ethics. Remedies, however, I do not despair of; the most promising of these being an extreme extension of inheritance taxation. In view of the fact also that the ad valorem and property tax methods of state and local taxation subject to fiscal claims only something like one fifth of the total taxable income of society, I am sure that much is possible through the development of state income taxation. If the transfer of the public estates into private ownership was a blunder, the returns from new taxation may well be applied to the purchase of permanent ground rents in the public interest.

These payments could well be fixed at the present worth of ground rent charge for approximately the expectation of life, or even for the possible duration of life, of the actual owner. The principle of escheat or of the inheritance tax carried to its ultimate logical extreme would take care of the residue of value.

None, therefore, of the objections which I shall offer to the typical and usual single tax analysis should be taken to constitute a fundamental or essential criticism. I am, for example, sure that, when the purpose is to appropriate for society a certain rental, the only wise method is to proceed directly against the rental as such, rather than by an ad valorem tax upon the value derivative from the rental. In those cases where the property burdened is in present command of the revenues upholding its market price, the results of the ad valorem tax do not seriously depart from those attending a direct appropriation of the rent.¹

¹ Nevertheless extreme absurdities and impracticabilities, falling still something short of mathematical impossibilities, forbid reaching by ad valorem methods any considerable fraction of the earning power of the property.

Suppose, for example, that a piece of property, by virtue of its net annual revenue of \$50, bears a market price of \$1,000. Each new tax, changing the net return to the owner, must change the market price. Thus, if \$10 is to be obtained for the fisc out of the revenue attaching to the land, the land, as retaining a net earning power of \$40, will be worth \$800. The rate of taxation necessary to get the \$10 is not 1 per cent, but $1\frac{1}{4}$ per cent, else the land will stand upon the tax books as over-appraised to the extent of \$200. This may not be a serious matter; is not, indeed, serious in the ordinary ad valorem collection of approximately one fifth of an income. But see how the case ap-

But in the degree that prospective changes in earning power find expression in a present worth of market price, it is practically disastrous and theoretically inept to make the present value the basis or the determinant of the present contribution to the public treasury. For the purposes of the single tax program the ad valorem policy is singularly inappropriate; not so much that to take the rent leaves, so far, no value to tax—saws off on the hither side the limb on which one is sitting—as that it strikes at the very heart of the equities involved. After society has taxed for years a town lot not yet within the area of practicable improvement, but yet valuable by its prospect of availability—has collected from the owner annually as the years have passed, say, 1 per cent of the present worth of the expectation that the owner will finally enter into the enjoyment of the income—is it not clear that society has foreclosed itself from later asserting its right to appropriate these revenues entirely? In cases of this sort, ad valorem taxation barter away for present revenue the public right to the future revenue; in substance, hypothecates future resources to obtain present funds. Thus the single tax position amounts not merely to the inequity of intending to repudiate the contract but at the same time to the absurdity of the present announcement of this intention.

But not only does the single taxpayer's plan of burdening the pres-
 appears with the single taxpayer's attempt to pursue the method to the extent of his ultimate purpose:

											Per cent	
With \$20 taken and \$30 left, price is \$600; rate to yield \$20 is											3⅓	
"	30	"	"	20	"	"	"	400	"	"	30	7½
"	40	"	"	10	"	"	"	200	"	"	40	20
"	45	"	"	5	"	"	"	100	"	"	45	45
"	46	"	"	4	"	"	"	80	"	"	46	59½
"	47	"	"	3	"	"	"	60	"	"	47	78⅓
"	48	"	"	2	"	"	"	40	"	"	48	120
"	49	"	"	1	"	"	"	20	"	"	49	245
"	49.50	"	"	.50	"	"	"	10	"	"	49.50	495
"	49.75	"	"	.25	"	"	"	5	"	"	49.75	995
"	49.99	"	"	.01	"	"	"	.20	"	"	49.99	24,995

This, by the way, is an opportune time to confess the error in an earlier assertion of mine that this ad valorem method can avail to appropriate at the outside limit only one half of the annual rental. This blunder was cogently exposed by Professor Edgar H. Johnson in the *Quarterly Journal of Economics* of August, 1910. That I never replied was due to the fact that I could not. Conceivably, indeed, I suppose, there might be a case with even a better reason. Mr. Johnson's article, however, was in tone and temper entirely cordial and courteous. He merely had me cornered—and still has.

ent shadow of the future income, at the same time with intending to appropriate this same income when it accrues, amount to an attempt to enjoy two taxes where only one can possibly be equitable (either of which, in fact, both by the test of justice and by the working of economic forces, must replace the other), but also from a theoretical point of view gets into even a worse case: the taxation of a present worth in the absence of a present income, or any taxation disproportionate to present income, is an affront to the fundamental principle of taxation in general.

When shall the individual contribute to the public income for the maintenance of public activities? When he has some income to contribute. From what sources shall society's current expenses be financed? From society's current productive power, the social income. Taxation is merely a method of redistributing the applications of the productive powers of society to the creation of a wider variety of goods—more of some, the goods of public providing, less of the goods of private production; it is a transfer of private income to the state in order to provide more goods of security or education, in place, say, of butcher's meat or of the entertainment provided by the movie show. To tax at present an income which does not exist at present, and thus to support the current state expenditure at the cost of future productive activity, is a fiscal improvidence similar to that of two centuries ago when the English government permitted the owners of lands to purchase for cash a perpetual exemption from imperial taxes. Carried far enough this kind of fiscal policy would mean that a government had sold itself unto death through encumbering its expected revenues in aid of immediate receipts.

Current revenue is the only proper object of current taxation, as is frankly recognized in both the theory and the practice of income taxation. It is, however, fairly to be said that this single tax fallacy is merely a derivative from the larger theoretical error which vitiates the general property tax as a whole. The blunder merely becomes the more serious as the share of the income aimed at through taxation is larger. In some respects, moreover, the effects are even more serious in their general economic aspects than in the purely fiscal. *Ad valorem* taxation consistently applied amounts to almost an absolute veto on all investments promising remote returns. Present progress in forestry taxation is based upon the recognition that *ad valorem* taxation tends to discourage the growing of new trees precisely as it has prompted

the exhaustion of the accumulated supplies. For the purposes of the present analysis, the planting of trees amounts to the purchase of a deferred annuity through the payment of a series of annual premiums, with only this difference, that the old age provision is a contingent annuity rather than an annuity approximately certain. Computing, then, that the general property tax upon an ordinary property appropriates one fifth of its income, it must follow that a rational tax upon a forest should at the maturity of its particular harvest appropriate one fifth of that harvest. To subject the undertaking to an annual tax is to compel the investor to submit in advance to an interest-bearing encumbrance on his putative future harvest. And precisely so with mines; the tax is a direct incentive to what is socially an untimely and wasteful exploitation.

The extreme of folly in this method of taxation is perhaps best illustrated in the case of a single-payment purchase of an old-age annuity. An outlay of \$1,000 at the age of 30 will provide approximately \$250 at 60 years of age, if the buyer survives to that time, and thereafter the same sum for each successive year for the term of his life.² By assumption, here is a property worth \$1,000 immediately upon the purchase of the right. The state claims, say, \$10 in taxes the first year. The purchased right increases in present worth not only by its interest accumulations but by the greater prospect of survival to the end of the tontine period. Each year, therefore, it pays a higher tax: not that it has yet afforded its owner any income or ever certainly will, but that a contract for a contingent future income has an increasing present worth. This annual increase of value is not, in fact, an income but merely the larger present worth of the hope of one day enjoying an income—precisely as the increase in the value of a field of grain as it approaches the time of harvest is not a daily receipt of income but a daily increase in the present worth of the future income. To be sure, if the owner sells in advance of the harvest, he ceases to be an investor in prospective income and the buyer takes his place. A rediscount of the note has occurred, the seller getting the advantage of the interest earned, but not yet due, as the sum of the past increases in the present worth of an income the receipt of which still lies in the future. The income from the field of grain accrues solely at harvest. So again, to tax a provident and wealthy father of a family and at the same time

² Mutual Life rates, 3 per cent actuarial basis.

to tax the prospective inheritor of the father's wealth on the basis of the increasing present worth of the hope of the sometime demise of the progenitor, is to make the general property tax a means of rampant extortion and injustice. When present value is merely a present-worth shadow of a future income, this value is a property, it is true, but a property the taxation of which should be postponed by virtue of the very fact that the income is postponed. It is time enough to make an individual income contribute to the general income when there begins to be an individual income.

But it is obvious that from all of this nothing follows more serious than that, as the single taxpayer aims solely to appropriate the rent, he would best do nothing but directly to take it. His indirection of method is unnecessary. His adoption of the principle and the machinery of the *ad valorem* property tax is a deal worse.

But the single taxpayer may find still other folk for company in his perplexities. If the appropriation of the rent must wait till there be rent to appropriate, what shall be done with the fact that, so long as there is no established policy of appropriation, purchasers must be proceeding in the confidence—or speculating in the hope—that appropriation will never take place? Thus, if appropriation finally does take place, there is inevitable disappointment and the charge of confiscation. The rule with taxation is similar to the legal rule: it is even more important to have a clear rule than to have a right one. Precisely this same difficulty presents itself in the regulation of public utility rates, and precisely the same line of treatment is indicated. Nothing will serve but the utmost certainty, promptitude, and consistency of action. With stocks, as with lands, anticipated earnings are capitalized into current market prices and undergo indefinite transfer—a traffic in the substance of things hoped for. To permit undue present earnings is to lead investors to part with their funds in the hope of the continuance of these earnings. To intervene later in order to bring an end to what ought never to have had a beginning amounts to the sudden confiscation of values long generally traded in but now lodged deflated in the hands of those investors least shrewd of political forecast. Thus, where the policy of rate regulation is unsettled, stock prices register the outcome of a great gamble on the very question of what this policy is going to be. When faith in public drowsiness flourishes,

or when confidence grows that adverse legislation can be controlled, stocks rise; when public opinion stirs, or some truculent executive gets especially strenuous, there befalls a stock panic. Financial and industrial stability come to be dependent not merely on the confidence, but on the justified confidence, that never will society actually arrive at the refusal to be further plundered.

But no advocate of the restriction of corporate gains has so far ever argued that his purpose could be accomplished through any early or late application of the ad valorem tax. If an exclusive privilege or a permit of overcharge increases earnings by \$50,000, the property goes up by \$1,000,000 in price. To subject this increment of price to a 1 per cent ad valorem tax is to reclaim only \$10,000 out of \$50,000 overcharge.

With either land rents or with franchise gains, therefore, all increment must be claimed by the state promptly upon its emergence. To anticipate the increment by taxation is nonsense. To delay is to delude investors and thereupon finally to penalize them for being deluded.³

The general condemnation—my condemnation also—of the single-tax demand for the confiscation of past increments rests substantially on the conviction that an institutional situation—long established and generally recognized rules of the competitive game—should constitute a social obligation to protect that player who proceeds in conformity with the rule and in reliance on it. If some change needs be made, if a reform is to come, the society that established the institution, rather than the individual who uncritically has acquiesced in it, must bear the costs of getting over to the better way. The principle of vicarious atonement, however acceptable among systems of faith, deserves definite repudiation here. Surely if another will assume my bond, pay my taxes, serve my sentence, discharge my fine, I may make shift somehow to acquiesce. The best place to have a boil has been

³ The doctrine of vested interest should be recognized in public affairs as the expression of the principle known in legal reasoning as the doctrine of estoppel. It was substantially under this doctrine, applied against the public, that overcharge rates were sustained in the famous Consolidated Gas Company case. By acts of commission certainly, if not by acts of omission, the public may cut itself off from the right to protect itself against an entirely obvious plundering. Privileges of overcharge may become irrevocable under conditions falling far short of the obligation of contract. Perhaps, indeed, the rationale of the obligation of contract itself is ultimately this same principle of estoppel, the creation of a justified belief or expectation which it would be unethical to disappoint.

wisely declared to be on some one else. But justice does not necessarily impose what self-seeking might approve. Confiscation remains none the less robbery, if there is such a thing anywhere, even though the title of the first holder were achieved through an obvious crime and the first authorized transfer were an authorized wrong. To justify confiscation by pointing to the emancipation of the slaves in America merely serves to put in question the ethics of emancipation. The English had already recognized the plain moral dictate of indemnity—a dictate none the less plain for us in America that it was later disregarded in the exigencies or the barbarities of war.

Viewed in the large, doubtless, land is human opportunity rather than human achievement, primary equipment rather than product. The single taxer insists, and rightly and wisely I again agree, that most or all of this original bounty should have been held as a joint possession and heritage among men, in equal and common right, to the end that, so far forth, there be always for all men an equality of opportunity. The fiscal requirements of society, the expenses of the joint community life, should be to the utmost possibility covered by the payments into the common treasury of the funds derived as rent from the social estates. Under competitive institutions this appears, indeed, to be the only practicable way of validating the principle of common property. Since we do not as a community farm the land, or live on it, or mine it, or hunt over it, the only socialization practicable is the socialization of the competitive return. In theory, indeed, the single taxer of the strict observance would permit no other sort of socialization. He is an individualist of the most radical type, even to the degree of questioning the strict ethical propriety of the social appropriation of any income due to individual activity. Accurately, therefore, he should profess himself not as a believer in taxation but rather as a contemner of all taxation. He intends an untaxed society. The right of society to the rent of the land he holds to be fundamentally conditioned on the fact that no individual can make good any claim in his own behalf. In ultimate doctrine this no-tax advocate is the direct antithesis of the socialist—finding social property justified only where individual property cannot be supported. So far, indeed, is he an individualist that even the working of the social estates he will leave to competition, socializing only the receipt of the rent. Nor even in the collection of the rent is he willing to make the state a land-

lord; he aims, indeed, at the appropriation of the rent by methods which shall preserve the essential features of private property and the incentives and guarantees of private husbandry—cultivating ownership. Tenant cultivation he regards, in truth, as one of the especially evil aspects of the present system. The privilege of cultivating land should not be confined to those wealthy enough to buy it, or depend later on their consent. Thus, while the socialist finds no individual production nor the ethical necessity of individual ownership anywhere, the single taxer finds nowhere any righteous type of property which is not upheld by the title of individual productive effort. With opportunity equalized, whatever any one produces in his competitions with others is ethically to be accounted his own production. If opportunity is an actual auxiliary in the process, all his fellows have equal access to it and share in it. Thus, the single taxer socializes land—after his peculiar methods—not because he is a socialist but because he is not. It is only the principle of individualism that finds a peculiar ethical right and duty to socialize treasure trove, jetsam and flotsam, and estates without heirs.

Not altogether irrelevant, therefore, is the objection to the single tax policy that the revenues which it would make the exclusive support of the fisc may turn out inadequate. But the single taxer's confidence that the revenue would be adequate does not require justification as hope or demonstration as accomplishment in order to prescribe that, before other sources of revenue are exploited, this be made to render its utmost return. Harsh necessity may enforce resort to other devices; but for none of these can he discover so clear an ethical warrant or any unquestionable warrant. His tax need logically be unique only on the condition that it is adequate.

But that so many of the contentions of the single taxers are acceptable can avail to approve their program only so far as it is a forward-looking policy. It does not follow as just that society shall now proceed to do what society admittedly ought once to have done, but did not then do: that the penalties of delay shall be visited not upon society as a whole, to which as a whole has attached the responsibility of delay, but, instead, on whatever individuals, after centuries of free and active trading, happen now to be the actual proprietors. It was society that imposed buying as the condition of independent exploitation, offering nowhere to any individual the permission of control under high exactions in favor

of the state. If it be indeed true that this fiscal reform is of transcendent importance—I myself believe it to be wise—let it speedily come. But never a great reform need come after this wise, unless by the fact that those who so greatly want it want it only on terms that others pay for it. Doubtless it is true that under the stress of war the state may force some men to death upon the firing line for the general good, though the jurisdiction of the majority for this purpose and to this extremity may be hard to establish. But fiscal reform can come, if it be worth the price, without this hit-or-miss selection of scapegoats. The minimum social sacrifice does not prescribe or permit the expropriation of the few, but only the spreading of the burden widely, as the theory of insurance should easily suffice to prove. Largely viewed, land may be and doubtless is a bounty of nature, whatever that may mean. But to its actual present owner it represents something quite other, a property into which have flowed income and savings of indefinitely various sources—most of them forms of wealth about which the single taxpayer draws his sacred circle. He holds that the unearned gains were the good fortune of the earlier holders who escaped their doom by selling to me or to you—gains which have undergone investment and reinvestment into houses, herds, factories, libraries, merchandise, steamships, and are now safe in their inviolability, buttressed about by utmost sanctities, certified to as properties assured against public claim no matter into whose hands they have fallen—thief, beggar, or prostitute. And all this by the sole fact that somewhere back in the chain of title there was a holder whose claim was ethically worthy of public approval, he having brought this wealth into being. And thus, by force of his original merit, somehow inexplicably attached to the property, all later owners are rendered safe. Thereby is justice construed as relative not to persons but to properties. Originally it was personal, to be sure, but later it became somehow appurtenant to things. It is the kind of property that a buyer purchases, not the source of the funds with which he purchases, that determines whether he shall be protected, even were these funds representative of earlier gains through unearned increments. But selling any possible sort of property, no matter what or when the fish he has caught, or the grain he has grown, or the cloth he has woven, or the house he has builded, let him beware what things he shall now buy with these funds of unquestioned title. If his righteous earnings go into land, society

may any day dispossess him. And likewise let later investors beware; if they buy from him this land over which the sword has hung suspended but has not yet fallen, he shall go away safe with the proceeds and they shall become subject to the menacing confiscation—shall fall into this pit of calamity contrived and set by society for the trapping of the unwary. Not only shall no man henceforth obtain further gains of unearned increment, but, buying now, any man may forfeit all of his earlier accumulations, no matter whence he had them. That fortunate man, however, who has already cashed in his objectionable gains shall be forever safe, resting in the vestments and odor of sanctity, if only he be wise enough to extend no further his operations in unearned increments. And under similar limitations he may pass along to any later vendee this same age-long immunity, he and they forever sheltered under the merit of an original impeccable possessor. But those men to whom the gainer through unearned increment shall sell, shall indemnify society for the titles it alienated, making good to it the gains of all preceding title-holders, settling in full the score of the centuries. Thus it appears to be a sheer error that holds guilt to be personal. Instead, it is solely an attribute of things, and is of the general character of magic and taboo, houses that are haunted and ass-skins that are accursed. And thus the naïve childlike fancies of a primitive age survive to make ridiculous the policies of a great reform.

Not less faulty in logic, if not quite so closely akin to the animism of primitive superstition, is the commonplace objection to the public retention of all kinds of ground rent: that unearned increments in society are many, land increments only one out of a larger class, and that therefore it is unjust and indefensible to prohibit this one, while leaving the others to flourish. And thus it appears again that justice, equally with merit or crime, inheres in the relations of things. And yet it must be clear that whatever is accomplished towards the elimination of privilege and the equalization of opportunity is so far good. Remedy must begin with something; it is well to do the next thing next, especially if this next thing be the most important and the least difficult thing. Burglary need not be continued or highway robbery tolerated, awaiting the time that murder or counterfeiting shall be no more. No crime, or better no criminal, may claim to go free till all other malefactors are jailed—a vested right in one's particular graft or iniquity.

Not much more respectable is the theory that, if unearned increments are to be claimed by the state, unearned decrements must be made good—say, for example, that if you be denied gain on your little speculation, I must be repaid the loss on mine. At any rate, it must be obvious that, if there is to be no gain for speculative operators, there will be no speculators. To retain the land rent for society, whatever and whenever it may be, is so far to leave nothing to invest in or to gamble about or to lose by—an illustration of the ancient truth that, if you will sit always on the ground, you can never fall off.

Little more to the purpose are the objections: (1) that the single tax violates the principle that burden should conform to capacity, and (2) that it provides no fiscal elasticity. But if the revenues are merely prices for the use of special advantages attaching to exceptional opportunity—a device to establish equality where else there would exist differential advantage—and are in ultimate theory not taxes at all but methods of making taxation unnecessary, the rule of capacity as an ethical guide becomes inapplicable, because irrelevant. It is even more important that revenues be stable than flexible. If in the long average these regalia revenues are adequate, deficit financeering will take care of any temporary stress; if they are inadequate, such supplements as must be sought will easily provide the elasticity.

The foregoing discussions, however, are intended merely to clear the ground for other issues, some of them appreciably more difficult and all of them more distinctly technical in character.

Will single tax burdens shift?

Advocates and opponents concur in the belief that they will not. As shifting, the single taxer would not desire the tax or the opponents object to it. It would be merely another indirect tax.

The theory for the case is clear. Taxes shift only through changes in market price. If the tax affect neither demand nor supply, it must be neutral as to prices. Only because, when hat factories are taxed, there will result a diminished supply of factories and forthwith of hats, is the tax a shifting tax—the hats higher priced to buyers. If a tax on land leaves the land supply unchanged, it will leave the volume of products unchanged and their prices unchanged. There is no way directly or indirectly whereby the rent should be affected or the price of products modified.

So runs the authoritative Ricardian doctrine. And in the large, doubtless, it is correct; and, for urban lands, accurate almost beyond criticism. It is not, however, quite so satisfactory in its applications to agricultural land. With urban land, certainly, there can be no response of supply to changes in burden. The lands will neither be more if taxes are low or less if taxes are high. It is a matter of mere superficialities, a geographical or surveying fact. Not so, however, with the fertility aspects of agricultural land. As hat factories will not be built excepting to the degree that the higher taxes can be collected from consumers, or must, under the same limitations, be allowed to go to decay for lack of renewals and upkeep, precisely so will the fertility of the land—quite as easily worn out or renewed—be affected by any exceptionally severe treatment at the hands of the fisc. It is only position rents that really conform to the Ricardian description of the “original and indestructible powers of the soil.” The skinning of land, the mining of its fertility, is as commonplace a fact as the digging of peat or the mining of coal.

The theoretical merits or demerits of the single tax will, therefore, be best examined in connection with urban conditions or with situations requiring substantially the same analysis. Whatever be the truth as to agricultural rents, they are a very minor matter in the problem. The ground values of New York City outrun in appraisal all the real estate of the country, inclusive of improvements, west of the Mississippi.

Agricultural technique, transportation, and rent.

It is, in fact, precisely the enormous increase in urban rents that leaves safe Henry George’s argument that improvements in transportation and improvements in the arts of production, together with all influences of progress in general, make for the growth of ground rent. The Ricardian analysis, with its tacit assumption of a practically inflexible per capita consumption of food and of raw material in general, leads inevitably to the conclusion that improvements in transportation and improvements in agricultural methods work to diminish rather than to increase agricultural rent. I have elsewhere shown how hazardous for any purpose, with the facts at present available, is the entire economic analysis of these rural land rent tendencies. Agricultural improvements tend to reduce the rural population and probably, though inappreciably, to lower agricultural rents⁴ as a world total.

⁴ See my *Economics of Enterprise*, p. 455.

Quite other, however, and astonishingly divergent in point of degree, is the trend of modern forces towards the increase of urban rents and urban prices—site values, terminal values, franchise values. The errors of analysis on either side of the present controversy with regard to rural land need not further seriously concern us.

Will urban ground rents be lowered?

Clearly not, for precisely the same reasons that they can neither be increased nor shifted—unless in a relatively inappreciable degree as the effect of certain minor influences yet to be taken into account. The single tax program intends merely a change in the recipients of the rent, substantially a new landlord, the state, rather than a change in the earning power of the land. There is so far, then, no justification for the propagandist assertion that wage receipts will be advanced, the incomes of cultivators augmented, or house rents lowered. The main significance of the change sums up in making the landed proprietors pay the taxes in place of the wage-earners, the cultivators, the tenants and the consumers, who before have done most of the paying. So much as this, however, should reasonably well fulfill the aspirations of any single taxer. Taxes in the United States run at something like \$85 per bread-winner.

Some small effect on interest rates and thereby some effect on the prices of durable goods might be experienced. The range of investment for fluid funds must contract to the extent that lands either disappear or diminish as possible lines of investment, employing no new funds or a smaller volume of funds. On the other hand, the wider range of untaxed investment, *e.g.*, in plant and improvements, should employ a larger volume of funds and employ these funds on terms of a much larger contribution to the economic output of goods. Interest rates should in the balance somewhat advance.

Prices to consumers.

That the effects upon consumers must be approximately nil will become increasingly evident with a more careful attention to the fundamental principles of the shifting process. No tax ever shifts, be it repeated, excepting through changes in market prices; no price can change excepting through modifications in demand or in

supply. There is obviously nothing in the situation to affect seriously the volume of consumer's demand; nothing again to affect the supply of land—urban land, note again—position utilities; therefore no possibility of higher rents to tenants; no room for the recouping of these rents from consumers, even could they be imposed; no new opening for the landlords to organize for the joint protection; no owner who is now disposed or could ever have been disposed to forego his rent for the benefit of other owners; no single item of land before worth occupancy that can now wisely be abandoned; no item that before was not worth occupancy that could now be gainfully improved. An acre or area tax might retire items of supply at or near the margin of occupation. But the appropriation of a fraction of the rent or a percentage tax upon the selling price will prompt the abandonment of no single piece of land; any percentage of nothing, no matter how high, can be no appreciable burden. Only those production goods the supply of which will be modified by the imposition of a tax can present the phenomenon of shifting; a shifting which, should it occur, must be in part at the cost of the consumer and in part at the cost of the complementary productive factors. Taxes on position rents or values cannot shift, precisely because space remains a constant.

Speculation as retarding improvement.

In the main, however, the foregoing analysis should rouse no protest from any instructed single taxer. He defers to no one in his loyalty to the Ricardian analysis; going so far, indeed, as to accept the Ricardian error that declares fertility taxes to be non-shifting. It is solely by discouraging land speculation and the attendant speculative withholding of land from use that he looks for higher wages or lower prices. True, the earth is still no larger nor the lands encircling the city more in area, but the supply of land available for use must be larger when once the speculators have been compelled to let go. The single tax, as he insists, will bring it about that they will let go.

I believe this contention to be entirely valid for whatever there is in it. Speculators are an appreciable influence in creating land scarcity—only that this influence is not much more than appreciable, so far at least as rural lands are concerned. In cities, speculation avails for something more, though even in the city it is, in the main, not the activities of speculation but the presence of

a speculative situation that must be held responsible for most of the vacant land. Of agricultural lands in speculative ownership there is an enormous area; but of this land there is little that is held idle, and this little itself near to the extensive margin of cultivation, on the outer fringe of things, where the social waste from the forfeited use is inconsiderable. High priced farming land gets cultivated no matter who owns it; and if not well or providently cultivated, the single taxer should not greatly labor the point; his plan would go far to make this bad condition general.

More serious are the speculative aspects of land holding and land improving in urban centers. So far, clearly, as the outlook for increasing earning power and higher prices tempts a particular class of operators to invest, a class of men with neither the disposition nor the resources for improvement, some land must be retarded in its improvement—those operators who intend a mere gain in price as a return upon investment outbidding the competing offers of the long-run investor. To remove the inducements to speculative purchase by cancelling all prospect of the private enjoyment of whatever rent or increases of rent shall attach to the land, is obviously to exclude this speculative demand.

But even the more clear is it that to fix the tax, whether present or prospective, at anything short of the entire earning power—to leave a shell of individual property and income—is merely to make the gains still greater in proportion to the investment necessary to control them and is to foster the greater speculative activity that goes with operations on margins. Some share of the furious speculation in single tax cities like Vancouver is to be accounted to this influence.

The clue, however, to most of the incredible confusions of the analysis attending the theoretical discussion of the relations between the lure of the unearned increment and the progress of city improvement is to be found in the failure to distinguish between what the speculators are accountable for and what speculative conditions inevitably impose and determine. A host of things have been charged or credited to the speculator, or to the speculation attending land uncertainties, or to the hurry of land seekers, that are due merely to the uncertainties themselves, and would manifest themselves if there were no speculators and no “sooners”—if, even, the state had constituted itself the sole landlord and were everywhere and at all times precise in its appropriation of rental incomes.

The wonder is, then, not that so much of the theoretical discussion so far has on the whole been wrong, though much of it has been so, but that so much more of it has been right—the contestants really not succeeding in joining issues, each chiefly in error in his conviction that the truth which he holds opposes the truth of another.

In the large, however, certain disagreements can be made to look like seriously held differences in fundamental theory. The single taxers are fairly unanimous in the assertion that the effect of the lure of the unearned increment is to retard improvements, especially in cities. Professor A. S. Johnson, on the other hand, holds that, but for the quest of gain through the rise of lands, the American frontier would today be somewhere in Ohio or Indiana, that the state appropriation of land rents works to retard improvements.⁵ Professor R. M. Haig reasons as to urban lands that to cut into the unearned increment by higher taxes would stimulate investment.⁶ Professor T. S. Adams takes by implication the view of Professor Haig, urging that by accelerating his improvements, in the faith that the rise in the price of land will indemnify the deficit in interest which his untimely improvements occasion, the landowner not only subjects himself to a sacrifice in order to procure the gain from the land, but also renders in return for this gain a *quid pro quo* of service to society through the lower house rents at which the larger supply of house room must find occupants.⁷

The single taxers' views excepted, the general opinion would so far appear to be that whether society takes the increment or leaves it, in either case the processes of improvement are accelerated.

Professor B. M. Anderson, however, offers as a possible basis of compromise the view that, whether or not society shall take the increment or shall leave it, there can be in no slightest degree either stimulus or retardation of improvement.⁸

But no matter how far a perverse ingenuity may succeed in making these authorities appear to disagree, the issues are not clearly joined—the disagreements rather apparent than real. In the main these writers are discussing different things: *e.g.*, the effects (a) of doubt as to what is to happen; (b) of doubt as to the

⁵ *Atlantic Monthly*, January, 1914.

⁶ *Quarterly Journal of Economics*, vol. XXIX (Aug., 1915), p. 829.

⁷ *American Economic Review*, vol. VI (June, 1916), p. 271.

⁸ *Quarterly Journal of Economics*, vol. XXVIII (Aug., 1914), p. 811.

extent to which it may happen if it happen at all; (c) of certainty as to that which must happen but has not yet happened; (d) of uncertainty as to the date of fulfillment of this certainty; (e) of speculative activity as to (a), (b), (c), or (d); (f) of the effects of the larger taxes on some one or other of (a), (b), (c), (d), or (e).

So much as this, at any rate, should be fairly clear: if improvements are to be fostered by the single tax, this must take place, in the main, not through subjecting the land to more burden but through imposing less upon the improvements. It is easy to see how building must be more, if this more of building comes to carry with it less penalty of taxes, and how also, with more building, house rents should be lowered. But it is not so easy to see how, merely because the tax is greater on the land but no less upon the house, there should come about more houses. There is nothing in this to make building cheaper, or land more plenty, or the burden less that goes with the utilization of the land. Nor is there any way through improving the land to diminish the burden attaching to the ownership of it. Funds will be invested in improving land whenever the return is large enough to justify their use. Precisely what the land tax has to do with the case it is difficult to see. With the tax cutting into the net return of the land whenever it comes to yield its return, or making greater the burden of holding it till the time when it will yield its return, the price at which an investor would buy the land, or a holder be willing to sell it, must fall by an amount to express the present worth of the increased tax. But all this has nothing to do with the question of when an improvement will pay such a return as to justify the making of it. The tax is a loss against which nothing will avail as escape—selling, building, or holding. It is just so much less that the land will earn, no matter who uses it, or when, and therefore a definite reduction in its present worth whether for sale or improvement or holding. This I take to be the substance of Professor Anderson's argument—a cogent and irrefutable argument for the purposes of his problem—the significance of the greater tax burden upon lands or rents, but not at all the significance of prospective changes in these rents.⁹

⁹ He does, however, actually deny any significance to these rental changes. "That the increment, which is a constant factor whether the land is built upon or not, should have any influence on a decision to build or not to build, is, on the face of it, impossible. . . . If the tax is a constant factor, whether the land is built upon or not, in what way could it affect the decision to build? A

Nevertheless the truth may be that the first and the immediate and temporary effect of the inauguration of the heavier tax would be to start improvements. Were the tax so thoroughgoing as to eliminate the speculative class entirely, or even a tax so burdensome as, by crippling their marginal unpreparedness, to compel any considerable part of them to let go, the lands must pass into the hands of a different set of owners, men with different policies and purposes of handling, previously outbid by the speculators but now permitted to buy at prices fitting their purposes and expressive of the present worth to them of the future earning powers as they estimate them for purposes of improvement. The fall in price would therefore be somewhat greater than the ordinary theories of capitalization would indicate. The owners are now a building variety of owners—the property now offering itself at prices adapted to their estimates of a wise building policy. There is clearly room here, in this redistribution of proprietorships, for a temporary acceleration of building.¹⁰

But with the period of readjustment completed, the capitalization process will have digested any increase of taxes into lower prices—a capitalization process, however, now conducted, on the

special tax on unoccupied land alone would cause more building, but factors which are constant regardless of the decision do not count among the pros and cons. It should be added, however, that since buildings are, under our general property tax, in fact more heavily taxed than most other forms of capital, an application of the single tax would relieve buildings of a disproportionate burden, and so somewhat stimulate building at the expense of other forms of enterprise" (*op. cit.*, p. 813).

¹⁰ Possibly also a tax newly imposed and catching unprepared holders who have purchased not for resale but for later improvement, in the expectation of moderate *ad interim* burdens, men to whom still the land is worth more for use than they could have for it by selling it, men who come now in presence of the problem of whether it be wiser to build forthwith than to wait—it is possible that these men, trapped in mid-process, may some of them build earlier because of the tax. If so, these are men to whom their enhanced *ad interim* costs are exceptionally severe burdens and who would therefore have been outbid by the demand prices of other men, had this larger tax been in clear and definite prospect.

But as to the truth of the case in this particular regard, I confess myself much in doubt. When one of these owners builds, he must have the extra ground tax still to pay—his annual cost, say, \$50 higher as occupant than he had expected. But he has no way to evade; must sell at a reduction which capitalizes the loss, or must hold under the same sum of increased burden, or must build still subject to this same larger tax. Thus there seems to be no change in the differential attractions of building and not building, each alternative merely shrinking \$50 in its net volume of service.

demand side, by builders less optimistic than were the speculators as to the prospective gains in the price or in the earnings of the land. The only substantial change therefore must accrue through the elimination of the speculative operators—assuming all the while, of course, the sort of tax that would entirely eliminate them.

But it still remains true, as the single taxer asserts, that the effect of speculation in city lots is to hold vacant a considerable body of property that the building investor might otherwise have utilized earlier. The scattering and sprawling growth of a growing city is in the main due to the fact that the city is growing and that many properties are being wisely held vacant waiting for the time to arrive when the appropriate improvement will justify itself as a long-time investment. Different men judge differently as to the appropriate time as well as to the appropriate degree of investment. The fact, however, that many buyers purchase with the sole purpose not of improving but of selling at higher prices to those who will improve, holding in the belief that the rate of increase in the selling price will afford an attractive return, not merely attaches to much of the property prices unattractive to building investors, but, by what amounts to a temporary restriction of supply of property, compels some investors to move farther out, if they are to make improvements at all. These speculative activities have therefore some bearing to accentuate the straggling growth of the city, to make ground rents higher, and to impose serious municipal wastes in the supply of street, sidewalk, water, light, and sewer services.

But it must be obvious that this general argument—impregnable as I believe it to be—with regard to the effect of the larger tax, has nothing to say as to how far the restriction of improvements may be due to an existing uncertainty as to the amount of improvement which will turn out later to be best adapted to the land, or as to the kind of use for which the land will later come to be sought. Either retardation or acceleration may result from the various possible estimates of these future uses or earning powers. If, for example, it seems probable—but not certain—that next year a viaduct or a bridge will make accessible my pasture tract yonder, I shall wisely decide to postpone the erection of a barn till I know definitely what is to happen and when—perhaps, therefore, till the thing has really happened. Cancel my hopes, and up will go my barn. Confirm them, and I may forthwith begin my laying of sidewalks, planting of trees, grading of

streets. Or, on the other hand, I may still decline to move in any direction till I make out whether these lands may not be marketable for terminal purposes or manufacturing sites. Or again, having settled in my mind that the uses are to be residential and that I myself shall finally do the building, I may still hesitate greatly and delay long as to whether I shall the more wisely build cheaply or dearly—balancing the chance of having to rebuild on such a higher scale of expensiveness as shall better fit the ultimate market, as against the danger of loss by making my improvements even more expensive than the prospective demand will turn out to justify.

These effects of speculative conditions—not of speculative operations and not of the pressure of taxes—are especially evident in certain quarters of growing cities, as, for example, upon South State Street, in Chicago, where midway between the established center of trade and the nearby decent and decaying resident sections, persist in shaky survival several blocks of cheap buildings, starved of upkeep, tenanted by saloons, cheap restaurants, peep-shows, catch-penny enterprises, museums of anatomy, and whatever other cover of varied iniquity the city authorities will overlook. These are typical slums in typical locations. Why are not the shacks removed? They pay satisfactorily enough, in view of the fact that the time has not yet arrived for building anything better. But even now something far better would pay, if only it were yet certain how good it must be to pay best in the long run. But fairly certain is it that the sort of building which ten years hence ought to be there must for several years afford inadequate returns—an extreme misfit for the intervening time. It is wise to wait. But equally certain is it that whenever the time does come to act, the building must be projected somewhat beyond the justification of the immediate demand. Delay is certain, for a time; and not less certain, at the proper time, is the acceleration. No tax would appreciably affect the problem. The same influences, now of retardation and now of acceleration, would be present and in full force no matter even were the state a rack-rent landlord, or were the sites available only as leased land or on terms of perpetual ground rents.

It seems, indeed, quite clear that no one improves in order to reap the advantages of rising prices or rising rents, in the sense that, as Adams and others argue, the landowner looks to the appreciation of the land to make good his losses on his building. To build is the only way to utilize the earning power of the land.

Whenever one builds he does it in the way which will afford the best return upon his building investment. In accomplishing this he must recognize that the investment in improvements must be duly proportioned to the investment in land—that to get a high earning power out of land, high-cost improvements must go with it, and that, when the earning power of the land is changing, any improvement that fits it at any one time must turn out a misfit for the later time. His only resource is to make the best compromise possible between the long-time and the short-time adaptation. So far as he goes in emphasis of the long-time aspect, he does this in the faith not that he will get a rise in price to offset his loss in building, but that this is the only way to achieve the maximum return on his entire investment. The increasing earning power of land advises a more expensive improvement in the present. Whenever he builds he must plan in view not only of immediate return but of the later higher return, making such allowance as he may for the uncertainties of the future. But the earlier he builds, the more cheaply he must build; the later, the more expensively. Were the prospect one rather of retrogression than of progress, as, for example, in a currently prosperous placer-mining camp, the buildings must be cheaper than the immediate demand justifies, in partial adjustment to a later period when they must correspondingly overrun.

When the prospects are speculative equally in the directions of rising and of falling income power, so much the more do the improvements vary in retardation or acceleration according to individual estimates of ultimate adjustments. Weighing as best he may in his estimate of present worths the difference between belief and certainty, each holder enters into a hazard of putative future incomes—his investment in excess of the purchase price of the lot being a more or less irrevocable adventure in building costs. The degree of hazard in this adventure is affected by the nature and the degree of the various chances involved.

I do therefore agree with the single taxers that speculation in some measure restricts the supply of land, that in some fraction of its many effects it works to retard improvement. I agree also with Anderson that the taxes have nothing appreciable to do with the case; but I nevertheless insist that prospective changes in earning power have much to do with it. I agree with both Haig and Adams that prospective increases in earning power do, in some share of their many effects, appreciably stimulate building

operations—insisting, however, that an obverse sort of stimulation would attend a prospective fall in earning power; that the amount of the tax imposed upon the land would have little to do with it; the effort to reduce to personal gain the unearned increment nothing to do with it.

And, finally, I agree with Johnson that the lure of unearned increment has been a continuous incentive to pioneering, even though speculative operations in the premises have been, as the single taxer rightly asserts, an incubus on the activities both of pioneering and of exploitation. But I hold that Johnson's deduction is in point of degree a gross exaggeration. The lure of increment merely induces a fringe of pioneering "sooners," some tens of miles in advance of the extensive margin of purely agricultural enterprise. It is a sort of twilight zone, a No Man's Land, an area of adumbration along the frontier margin, attending this margin as the shadow the subject, not directing or placing or determining it. That my shadow is some feet west of me at each moment of the forenoon does not indicate that by noon it will have preceded me into the next county. It is merely true that without the inducement of the prospective rise of land incomes and land prices, the American frontier would for all of our history have been some fifty or a hundred miles in the rear of where it actually has been.¹¹

But all this is entirely aside from the question of whether it might not have been as well or better that the frontier should now be in Ohio. It is not obvious that the rapid preëmpting of government land, to the point that now the age of free land in the world is mostly past, has been so distinct a blessing. To whom precisely? To you or to me? Or to which one of our landless sons? It must have been rather to that vague retreat of unprecise thinking, the country or society—that gets some good from growing more, or more widely or more thickly: the thinking that discovers, for example, that because this country "owns" the

¹¹ The policy of land grants to railroads has had, doubtless, larger effect. But, even here, the same principle applies, only that the area of pioneering railroad adventure is often greatly wider, even to the extent of marking out ribbons of narrow occupation entirely across the continent. Extending vertically outward beyond the extensive margin of gainful agriculture on either side of it will always be found the intermediate area of individual adventure in the quest of the lure. It is, however, not so obvious that the land grants to railroads should be declared unearned, or the gains achieved regarded as lacking any social *quid pro quo*.

Philippines, includes more people, and totals more wealth, and therefore can collect and spend more taxes, you or I must be somehow better off; or that it is matter of congratulation to any one but the land grabber that the city or state should grow; or, again, that the death of a few millions of men more or less is an economic loss of, say, \$2,000 each to the survivors, or to the earth, or to society, or to the cosmos, instead of to themselves.

But should not this evident fact that the unearned increment has attracted enterprising men horizontally further forth mean also that it has pushed building adventures higher into the air? Having located cabins deep in the woods or far out on the prairies, why may it not have added further and earlier stories to the skyscrapers? Well, if in order to get title to the city lots, men had to build on them or live on them, such must have been the influence. Or if to hold the business sites, men had also to sit wind-buffed on the cornices of their skyscrapers, thereto they must have climbed and have clingingly, continuously, numbly and coldly sat. It was the fact that men were physically tied to these promises of title, had to occupy their homesteads and preëmptions and work their timber claims, that took these men further out into the wilderness, and held them there; and, being there, they had to work there, since their labor, as different from their investment, had to be done each man in his own presence.

Are there unearned increments?

And did not these pioneers pay well in privations, lonesomeness, and danger for all that they got? Verily—but paid to whom? and on terms of what *quid pro quo* of service? Whether the rewards be defended either as moderate indemnity for the privations undergone or as return upon foresight and energy in pushing forward to grasp an offered prize, the question still remains whether the prize was wisely offered. It is the central problem of institutional policy in the economic field to limit and apportion private gain to social service. Neither shrewdness nor wisdom connotes an ethical value or affords secure warrant of rightness or service.

But both Johnson and Adams make much of these privations as being of the nature of services rendered to the state, or to society, or to humanity at large and in general. There need be no question that, inasmuch as the lands were offered on terms of these privations, and inasmuch as the terms and conditions were fulfilled,

there can be nothing now for the case but to abide by the contract—that confiscation here is as immoral as any other variety of robbery. But still again, as institutional policy, what have these privations to do with the case? Was the land placed there by these adventuring geographers? Or retained there by their safe anchoring? Or improved for some one else by their labors—or even for themselves? Or saved from any menacing disintegration or decay? Recall that the purpose of the argument must be to show that it was wise social policy, as a human gain in the large, that these land seekers should be induced to hurry forth and get there first; that in some phase of social accounting these individual privations constituted an inevitable debit incurred in the securing of some greater social gain.

Adams, indeed, takes this position quite uncompromisingly and on distinctly economic grounds rather than as deduced from some vague, conjectural values in the field of sociology or politics or patriotism. Through this pioneering, “Farmers and farms are more numerous, farm products more plentiful and farm [product?] prices lower, because of the unearned increment. The latter is diffused . . . in part to the purchasers of farm products.”¹²

¹² *Op. cit.*, p. 279.

But I submit that the net social result of sending men out where “the farmers work for less than day’s wages, if we measure his reward in annual income alone,” is, so far, to waste the labor of each man. Allowing for the productive energies employed in moving his product from its remote place of growing to the market, the result in terms either of price or of nutriment would have been greater had he remained on the hither side of the extensive margin. If in either case he would have farmed, food is scarcer and dearer for his change of place. If he were an artisan, but now as pioneer turns perforce to amateur agriculture, the loss in some other kind of product, in which the prices are now higher for consumers, must far outweigh the increase in agricultural product. In the form of a mortgage on the future we have been paying the pioneers for wasting their time.

But I do most cordially agree with Professor Adams that the owners of the “much unused and presently unusable land . . . upon which they are willing to pay taxes, only because they expect to reap and benefit by the unearned increment,” have really in this way and to this extent rendered a *quid pro quo* to their fellow men—to this extent, therefore, have ethically made good their titles and are receiving increments not unearned but fairly

purchased; though still I question the institutional wisdom in the case.

But from this fact of these various payments Professor Adams deduces an argument in support of the general property tax as fair and just both in principle and in working, as deriving revenues from commendable sources, and as affording generous returns. I should have deduced precisely the opposite conclusion. But in the background of the thought there is evidently a principle on which he and I are in substantial agreement. He is genuinely pleased, as also am I, that some of the unearned increment has thus been intercepted for public purposes; only that he is glad of the particular method, the while that I regret it. Each of us is thus a single taxer in essential spirit.

In the main purpose and emphasis of Adams' article, however, I more than cordially concur. I believe that he has done the science of taxation an immeasurable service in exploding for all time, not the general doctrine of the capitalization of taxes, but a bastard offspring from it—the notion that every purchaser of a property already overtaxed buys unaffected by the general property tax, holds his property quit and free of tax burdens, and may now be called upon, through the imposition of further taxes, to be initiated into the great brotherhood of the duly burdened. Most economists, I believe, have been uncomfortably conscious in their noses of a fallacy somewhere in the near vicinity, but have not been entirely successful in locating it, or in applying the appropriate remedial or preventive formula. Such at all events has been my own case. The doctrinal essentials, however, are easily at hand in a correct notion of what capital is and of how it functions in the capitalization process.¹³

¹³ Since this article was submitted and accepted Professor Seligman in the December number of this REVIEW has put in question certain of Adams' positions. Still, however, the ultimate issue appears to turn upon the relation between property taxes and interest rates. The disputants substantially agree that those who buy taxed property get as good bargains at the prices paid as those who buy untaxed property. The prices merely reflect the net incomes in prospect. But Adams—agreeing with Seligman that to reduce a net income is proportionately to reduce the value of its property basis and that there can be, because of the tax, no difference in the *rates* of return to different investors—yet holds that the very fact of taxation upon property must be ranked as among the influences restricting the net returns from property and thereby restricting interest rates. These tax burdens upon the investors manifest themselves precisely in the fact that they make net incomes dearer, in terms of present purchasing prices. The investor gets less income from his

It must be added that even were it true that the capitalization process would justify the imposition of further taxes as a matter of justice between persons, it would still be disastrous in its effect upon the general welfare. There is no such thing as justice between properties; but it is nevertheless important that investments be by taxation so equally affected in their incomes that the distribution of investment shall not by fiscal policies be fostered in

money. There is a burden, therefore, not precisely on him as the purchaser of property, but rather on him as the holder of funds the earning power of which is restricted through the existence of property taxes.

Seligman, as I interpret him, holds that taxes on property—or, perhaps, taxes on some sorts of property—have no effect to harm investors in other properties. Any purchaser after the tax buys subject to the tax, buys at a price appropriate to the reduced net earning power of the property, and buys on a capitalization rate which is independent of the tax on this property or on other classes of property.

At the logical extreme, therefore, Adams should argue that a property rendering a \$50 income must be worth, on a five per cent basis, \$1,000 as present price; that this property, under a general property tax, would change to, say, a \$40 income discounted on a four per cent basis; that no change in price would occur but only a change in the net earning power of the invested funds. Seligman, on the other hand, should argue that the property would be bought at \$800, its income of \$40 remaining at a five per cent basis upon the new and actual investment price.

So much of this, at any rate, is clear; the rates of return upon different investments cannot be different because of the varying tax burdens on the different properties. All investments must be equally affected, in the sense that all are equally taxed or that none is taxed. Adams says that all are taxed under the guise of the lower interest rates which the imposition of the tax must bring about. Seligman appears to say that all are free from tax by virtue of the purchase of diminished incomes at proportionately diminished prices; smaller investments but unchanged rates.

To assert that in my opinion both disputants are wrong would be an awkward way of formulating my conviction that the entire analysis requires a change of venue, or better, a new method of approach. I should say:

(1) That no property tax, even one so general as to affect all existing properties, would in the slightest affect the interest rates of the market, if only new investment funds and other openings for new investments were left untaxed. Such a tax would amount merely to a *pro tanto* confiscation of the incomes on the burdened properties without in the slightest changing the capitalization rates.

(2) That were the tax only upon new funds for investment or only upon the new properties derivative from the investment of these funds, the capitalization rate would fall approximately *pro tanto* and the previously existing properties would rise in market price without any slightest change in the incomes derivative from them, but with changes solely in the *rates* of return.

(3) That were the tax imposed upon all properties, old as well as new, the net incomes would fall, and probably, though not certainly, would fall in something like the same proportion with the fall in rates of interest. No

some directions and impeded in others—unless, of course, it be for specific reasons desirable to discourage certain lines of investment.

Will the single tax congest urban populations?

Yes and no, depending on what one means by the term; and depending partly, also, on whether the tax be applied locally or generally.

To shift taxation from all other property to land amounts in general to the putting of the tax on what can not move and exempting those things that can stay, go, or come. As between cities, it is a competitive method of bonus or premium. It is equivalent to a general and perpetual tax exemption for all dwellings, factories, equipment and stocks, and for investment in general, other than the land that cannot get away. No more effective competitive device for promoting city growth could be devised, as long as competitors refrain from adopting it—irrespective, of course, of any question of what is the use of it to any one but the landowner.

Vancouver inevitably made a great growth of population and business through it—inevitably attracted thereby an inflow of laborers and industries in structural lines, stimulated therewith a great advance in the rentals of land, and thus inevitably, since the appropriation of rents was only partial, fostered a frantic speculation, which finally, when the slackening building activity threw laborers out of employment and speculation receded, ended

great change in present worths would result, with the exception that the less durable of income-bearing properties would suffer relatively less.

(4) That for any purposes of the capitalization analysis, the concepts of property, of capital, or of investment must be so widened as to include not merely all operating funds in rent or other gain-seeking activities, but all the time-using methods or properties in which funds may be expended: all the durable goods like houses, autos, and furniture, which, as affording future incomes, absorb present investment funds; all banking activities and insurance; all lending to state or other consuming borrowers; all outlays in promotion, publicity, salesmanship, organization, speculation; in short, all gain promising or income rendering or income earning employments of money or of banking credit.

If, therefore, Adams is to be interpreted to include new investment funds and new investment properties in his tax, he is right in asserting that the capitalization rates must be affected; and wrong, merely in including previously existing properties as within the causal field. Seligman, also, must be declared to be correct in denying that property taxes necessarily affect interest rates; and wrong, merely if he be interpreted to deny that taxes on new investment funds and new investment properties are also to be regarded as outside the causal field.

in a colossal collapse and liquidation. But the town was there, a much larger town—if it be to any one's purpose to personify and congratulate a town. A partial single tax is a dangerous thing.

But does it congest population? It builds the city higher as well as wider, more people to the acre and more acres. But, essentially, it is not the tax that congests the population, but the growth of the town. With increasing demands and higher prices for shelter, building increases at both the intensive and the extensive margin.

Consider, however, what would be the effect if all towns followed in equal degree and by similar methods the single tax principle. There could be no marked disturbance in the ratio of the total urban to the total rural population or, by assumption, any redistribution of urban population between cities. On the face of it, the sole advantage would appear to be that the land-owners would be compelled to transfer their rent rolls to the state, all other property owners going free. But this process of setting all other property free of tax would also mean the freedom of future improvements. It would for a time amount to a gift to the owners of existing houses with a corresponding stimulus to the supplying of more houses, at lower rates per unit of service. This larger supply of houses could only be achieved through increases both at the intensive and the extensive margins. Building would go higher and extend more widely—more house room for the money and a larger consumption of house room relatively to other goods.

How about the drying up of building loans?

It has been speciously argued that inasmuch as most building operations are financed through borrowed funds secured primarily and mainly by the ground values, the land tax would mean that the supply of loan capital would be driven out of building enterprises. I confess that for a time this seemed to me cogent and valid reasoning. But see how easy it is open to flank attack, and how disastrously it works for its opponents. I have, say \$1,000,000 and am projecting a building. I must first buy my lot, costing \$1,000,000, and then through the pledge of it procure money, another million, with which to build. But, if I could have the lot on terms of paying the annual rent tax on it, I need borrow nothing. The rents would as well pay the \$10,000 of tax on the land as they would pay the same amount of interest on my building

loan. I am now independent of the loan market. A great argument was this.

The wisdom of the entire exemption of improvements from taxation is obviously tied up with the question of the property tax in general. In the past, under the actual working of the general property tax, improvements have been subjected to especially heavy burdens, investment in buildings therefore relatively retarded, and house room thereby made especially dear. Any remedy to be applied should be carefully guarded against undue emphasis in the opposite direction. No ordinary tax is bad or good unless as part of a system. Investments in improvements should presumably bear the rate of burden common to other lines of wealth that are flexible in supply. In fact, however, most other lines of investment do actually evade the general property tax as well as other state and local burdens. So long as this remains a fact, investments in buildings should wisely be left entirely exempt. Ideally all ordinary incomes, property or other, should participate in contributing to the public revenues—but as incomes, not as property bases of incomes. Nothing can be more unwise than the relative freedom of personal property incomes from public burdens. The personal property tax should disappear only with the disappearance of the property tax in general.

I trust that the necessary limitations of space—occasionally betraying me, I fear, into seeming dogmatisms of statement—may serve at the same time as my excuse, if need there be, for unintentional inadequacies in reporting the positions that I have subjected to criticism or attack. In spirit, at any rate, if not in actual accomplishment, I hold argument to be never rightly a game for victory, or anything more or less or other than always a coöperative investigation. It is a pleasure, therefore, to adopt for my present purposes the following admirable words from the genial and brilliant paper of Professor Adams, against which I have directed certain objections. I also may “have written more dogmatically than I feel, and more emphatically than the rules of polite controversy warrant.” But “if the position taken be unsound, it will bring down surer and swifter retribution, a speedier recognition of the true doctrine.” Not less perhaps for us single taxers of the looser observance than for our fellows of the stricter faith, is it to be desired that we continually exercise ourselves in the amenities of discussion.

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A RULE FOR TESTING TAX VALUATIONS OF RAILROADS

I

The difficulty of determining the market value of a railroad for taxation under an ad valorem system is so great that any additional device for testing the fairness of valuation may be of interest. The investigations recorded in this article were conducted with the object of determining whether a mathematical rule could be used to assist in establishing the fairness of valuation.¹ The possible use of any such rule would be limited, but the results would be fairly definite within a certain scope. No attempt is made to set up a rigid and inflexible formula, to be applied to the exclusion of independent judgment. The rule is to be used, rather, to supplement knowledge obtained in a more direct way. The investigations were confined to the roads of one state, Wisconsin, though the rule proposed may be capable of wider application.

Under the law as it stands on the statute books of Wisconsin,² railroads pay the true average rate of taxation on the market value of the property—the amount that could be obtained for the property at a sale taking place under normal conditions. There is no need of enlarging upon the difficulties of arriving at the correct value of the property; the defects of the various methods of commercial valuation are too well known to need comment.³ It is apparent that true value cannot be ascertained by any simple method or rule of thumb. In practice the tax commissioners make estimates independently, and while each one takes into consideration practically the same elements, no two of them give the same weight to any one of the elements.⁴

Conditions are very diverse in the different roads of Wisconsin.

¹ This investigation was undertaken at the suggestion of Professor Thomas S. Adams, formerly of the University of Wisconsin, now of Yale University. The writer is greatly indebted to Professor Adams for help in working out the problem, to Professor Charles J. Bullock, of Harvard University, for assistance in preparing the results for publication, and to Professor E. E. Day, of Harvard, for suggestions of changes in the statistical methods used.

² Wisconsin Statutes, 1915, ch. 51.14.

³ For description of methods of commercial valuation, see Bulletin No. 21, of the U. S. Census Bureau, issued in 1905, *Commercial Valuation of Railway Operating Property in the United States 1904*.

⁴ *Report of Minnesota Tax Commission*, 1912, p. 204. Extracts from hearing before Wisconsin Tax Commission, Madison, Wis., Dec. 14, 1911.

The physical valuation made by the engineers places the cost of reproduction of some roads as low as \$10,000, while others are placed at nearly \$100,000,000. There are many lumber railroads in the state along which lumbering operations have practically ceased, but which are still operated because population has centered around the road and there is a demand for a common carrier; yet the profit from operation is small. One road is operated entirely by a man and his son. One electric road is included with steam railroads because freight is transported over the road. Another road owns a ferry and a valuable terminal but practically no mileage in the state. Another has less than forty miles of road in the state, but has a valuable terminal.

The difficulty of arriving at a true estimate of the value of the roads as a whole is illustrated by Figure 1 and Figure 2, in which a comparison is made between the par value of stocks and bonds,⁵ the physical valuation (cost of reproduction new), and the tax commission's latest estimate of the value of the road as a unit.

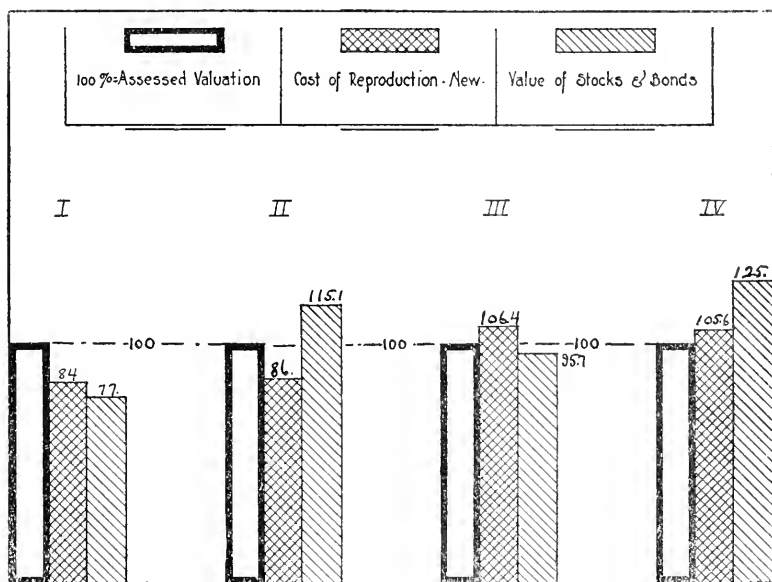


FIGURE 1.—Comparison of the assessed valuation, cost of reproduction new, and par value of stocks and bonds of four typical large roads.

⁵ Par value of stocks and bonds is taken, rather than market value of the securities, because par value is obtainable for all roads, large and small, while the market value of the securities of small roads is often unobtainable.

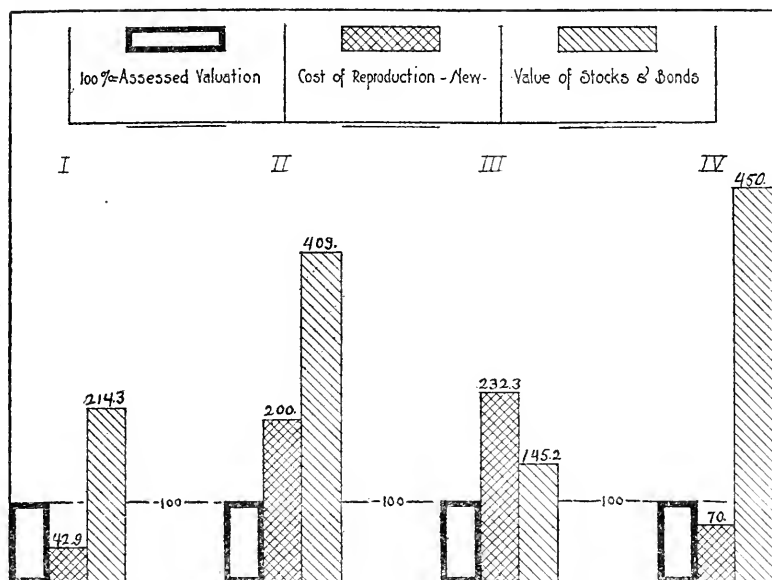


FIGURE 2.—Comparison of the assessed valuation, cost of reproduction new, and par value of stocks and bonds of four typical small roads.

It will be noticed that the several values more nearly correspond in the case of the large roads than in the case of the small roads, indicating that the task of the commissioners is more difficult with the small roads. The task is hard enough in every case, however, and the varying relation between book value, cost of reproduction new, and tax valuation, indicates the difficulty of securing a valuation fair between roads.

Is it possible to formulate a rule, applicable to all the roads, by which relative fairness of valuation, as between the different roads, can be established?

II

A proposal to formulate such a rule might easily lead to a long discussion of the possibility of an accurate balancing of the different elements of value. The chief purpose of this article, however, is the description of the experimental application of the proposed rule, and it seems better to state the rule as a whole before entering upon a discussion of any of the considerations which led to the adoption of the various steps designated. The rule is:

The comparative fairness of valuation of steam railroads on an ad valorem basis, may be determined in the following way:

1. Divide the roads into groups, combining in each group, as far as possible, roads of like size and similar conditions.

2. Find the total value of each group by adding together the valuations of the individual roads, as fixed by the tax commissioner.

3. Fix upon the chief factors which govern value, and determine the weight which should be assigned to each factor. In the present instance, the factors, and the weights assigned to each, were as follows:

<i>Factors</i>	<i>Weight</i>
1. Gross earnings—average of the five years past.....	20
2. Gross earnings—the year past	5
3. Net earnings—average of the five years past.....	50
4. Net earnings—the past year	5
5. Physical valuation	20

4. Find the percentage each factor forms of the total value of the group. That is, find the percentage of total gross earnings, on a five-year average, of all the roads in a group to the total value of the group; and find similar percentages for the four other factors.

5. Capitalize the gross earnings on a five-year average, and each of the four other factors of value of each road, at the percentage found to be true for the group to which that road belongs.⁶

6. Compute the weighted average of these five capitalized values of each road, weighting each of the five factors as above designated.

7. Determine the percentage of assessed valuation to recapitalized-and-weighted valuation for each road of each group.

8. Calculate the average of such percentages for the roads of each group.

9. Determine, for the roads of each group, the ratios of the individual road percentages to the group average. These ratios, expressed in percentage form, constitute a series of relative numbers, in which figures above 100 indicate relative over-assessment, and figures under 100, relative under-assessment.

⁶ It is undoubtedly an incorrect use of the term to speak of "capitalizing" physical value. However, avoidance of the expression would appreciably complicate the statement of the rule. Since the expression is not misleading, its use seems warranted.

III

The first process proposed in the rule is necessary because the general conditions, such as the character of the territory served, density of traffic, and stability of industries, together with the fact that many of the roads were built to serve a temporary purpose, all tend toward inequality.⁷ Consequently, in the present instance, the roads—fifty in number—were divided into eight groups, roads of like size and similar conditions being combined. A brief description of these groups may serve to make clearer the necessity for this part of the rule.

Group I includes the six trunk lines which furnish the main transportation facilities of the state. Two or more of these roads traverse every important section and together they have a mileage of 6608.34 miles out of a total railroad mileage in Wisconsin of 8026.32 miles, or 82 per cent of the mileage of the state. For the purposes of valuation there are no important differences between these roads.

Group II consists of a car ferry company, a bridge company, and two railroads which have only a few miles of road in the state. The situation of these companies is anomalous. The values of all depend on terminal facilities, and so they are grouped together. Mileage possesses little or no significance in the case of any of them.

Group III comprises short bits of line serving very good territory.

Group IV is a collection of roads the majority of which are entirely intrastate. At first glance these roads would seem to be important parts of the transportation system, but they are found to lack something, either in organization or in territory served.

Groups V and VI may well be considered together. All roads in both groups connect with two or more of the roads in Group I, but the roads in Group V have better connections, are about twice as long, on the average, as roads of Group VI, and serve larger towns.

The roads in Group VII each connect with only one of the roads in Group I, generally with the less important branches of those roads, and they serve poor territory.

The roads in Group VIII are almost all lumber railroads, and were built to serve a temporary purpose.

The value per mile, by groups, computed from the valuation

⁷ F. W. Taussig, *Principles of Economics*, bk. VII, ch. 61, ¶ 1.

fixed by the tax commission in the year preceding this investigation, will illustrate the wide variation of conditions.

			<i>Average value per mile</i>
Group I	Six roads		\$46,650
" II	Three roads and one bridge company.....		247,800
" III	Five roads		22,000
" IV	Seven roads		11,500
" V	Six roads		5,000
" VI	Seven roads		3,400
" VII	Nine roads		2,600
" VIII	Seven roads		1,800

The second process of the rule is simple. The total value of each group is found, in order that the relations which hold good for the group as a whole between value and gross earnings, value and net earnings, and value and physical valuation, may be ascertained. The necessity for this step is clear when we consider the fourth and succeeding processes of the rule.

This brings us to the third process: fix upon the chief factors which govern value, and determine the weight which should be assigned to each factor. The most difficult part of the problem is, not to ascertain which indicators of value are more reliable and which less, but to decide exactly how much importance should be

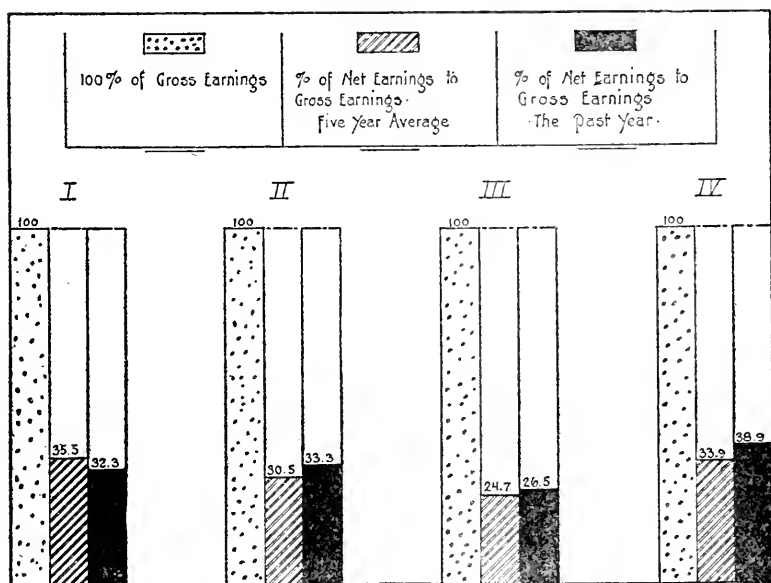


FIGURE 3.—Comparison of the percentage of net to gross earnings, on a five-year average and for the past year, of the four groups of larger roads.

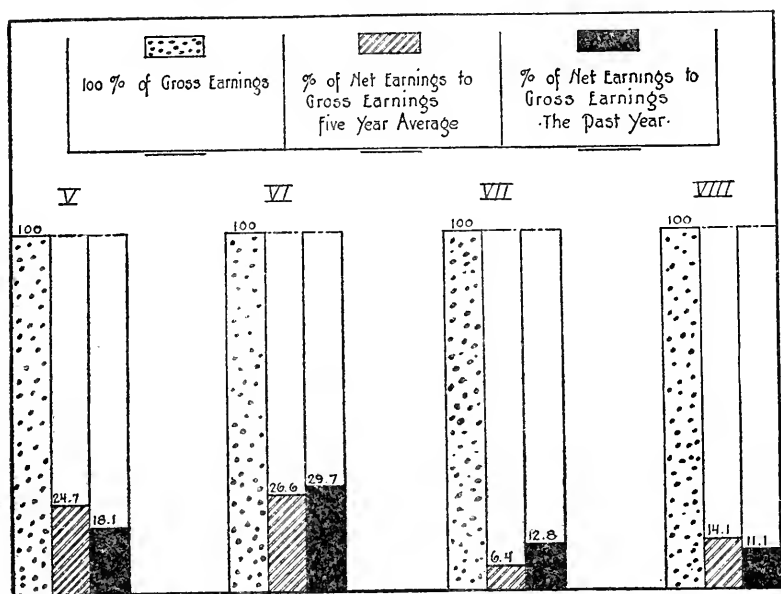


FIGURE 4.—Comparison of the percentage of net to gross earnings, on a five-year average and for the past year, of the four groups of smaller roads.

ascribed to each. It may be well to consider the various factors, not exhaustively, but sufficiently to bring out their relative significance.

It is not safe to use gross earnings as the sole basis, because of the disparity between corporations in the relation of gross earnings to net earnings. The inequalities that would result, if the estimates of value were based solely on gross earnings, are shown by Figure 3 and Figure 4. These diagrams show the per cent of net earnings to gross earnings. The per cent of net to gross declines noticeably from the large to the small roads.

Further, in the case of interstate roads, there is difficulty in apportioning gross earnings between states. How should such apportionment be made? There are many different methods, as, for example, the one which makes use of the traffic mile basis with a study of every waybill. Other bases are the car mile and track mileage. The method adopted may vary according to the result desired.

Several authorities, however, still give gross earnings great prominence in the method of valuation. Mr. Allen Ripley Foote has advocated the following scheme of taxation:⁸

⁸ *State and Local Taxation, Second National Conference, 1908, p. 501.*

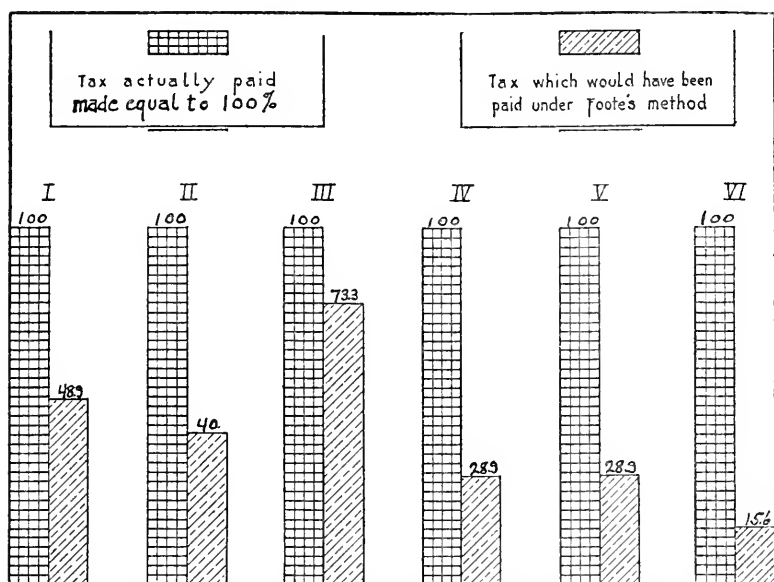


FIGURE 5.—Comparison of the tax which would have been paid, by six of the larger roads, under the method proposed by Mr. A. R. Foote, with the tax actually paid by those roads.

1. Assess a flat rate of 2 per cent on the gross operating revenue of all corporations, regardless of the margin of difference between their total revenue and their total operating expenses. This rate is to be paid by all corporations whose operating expenses are 90 per cent or more of their operating revenue.

2. Add a differential of $1/16$ of 1 per cent computed on each 1 per cent increase in the margin of difference between total revenue and total operating expenses in excess of 10 per cent.

How does the result of this method of assessment, which places the whole emphasis on one year's earnings, compare with the results obtained by the Tax Commission of Wisconsin? (See Figure 5.) Under Mr. Foote's method a road whose operating expenses, plus taxes, were 74 per cent of operating revenues, would pay a 3 per cent tax on gross earnings. This is only slightly in excess of the rate applied practically by the commission to the least profitable roads of the state.

We may compare also the results of the method of Professor Plehn, of California, with the results of the Wisconsin commissioners' method. By using his formula,⁹ Professor Plehn arrives

⁹ *State and Local Taxation, First National Conference, 1907*, p. 635; C. C. Plehn, *Taxation of Public Service Corporations*.

at the gross earnings rate equivalent to any given rate of taxation on general property. The formula rests on the assumption that a public service corporation is worth what it can earn at the schedule of rates which it is permitted to charge; and that earnings, in the long run, determine the property values of such corporations. To employ this method it is necessary to know three things: (a) the average ratio of net to gross earnings of the class of corporations in question; (b) the average rate of return which investors receive who purchase corporation securities at market prices; (c) the rate of general property tax on the true valuation. Professor Plehn's formula is: The ratio of net to gross earnings divided by the rate of return to investors multiplied by the rate of the tax on true valuation equals the rate of tax on gross earnings.

The ratio of net to gross earnings of the roads in Group I is 32.3 per cent. Professor Plehn assumes 6 per cent as the average return to investors. The rate of taxation on a true valuation of general property in Wisconsin in 1912 was 1.1832 per cent.¹⁰ Then, applying Professor Plehn's formula, we get:

$$\frac{32.3}{6} \times 1.1832 = 6.37.$$

A tax of 6.37 per cent of the gross earnings of these roads would, therefore, be equivalent to a general property tax on the full valuation.

The ratio of net to gross earnings of the roads in Group VIII is 11.1 per cent.

$$\frac{11.1}{6} \times 1.1832 = 2.19.$$

On these roads a tax of 2.19 per cent of the gross earnings would be equivalent to a general property tax on the true valuation.

Net earnings are a better guide to a true valuation than are gross earnings. Ordinarily, capacity to produce income will be the dominant factor in determining values,¹¹ but there are reasons why even this significant indicator should not be followed without reserve. There may be untrustworthy or inaccurate bookkeeping. Different forces may be at work in different roads. Prosperous roads may tend to minimize net earnings, while other roads, wish-

¹⁰ *Report of the Tax Commission, Wisconsin, 1914*, p. 16. The investigation was begun in 1912.

¹¹ Robert H. Whitten, *Valuation of Public Service Corporations*, ch. III, § 50, p. 42.

ing to make a good showing, may exaggerate them. A very unsound condition of some of the roads and extreme disparity of conditions are indicated by a comparison of net earnings with the sums actually paid out for interest and dividends. The small roads pay a very large amount of interest in proportion to earnings, or declare dividends which seem not to be justified. There is little doubt that some roads are paying "dividends" out of capital. (See Figure 6.) Then, too, exclusive taxation of net earnings

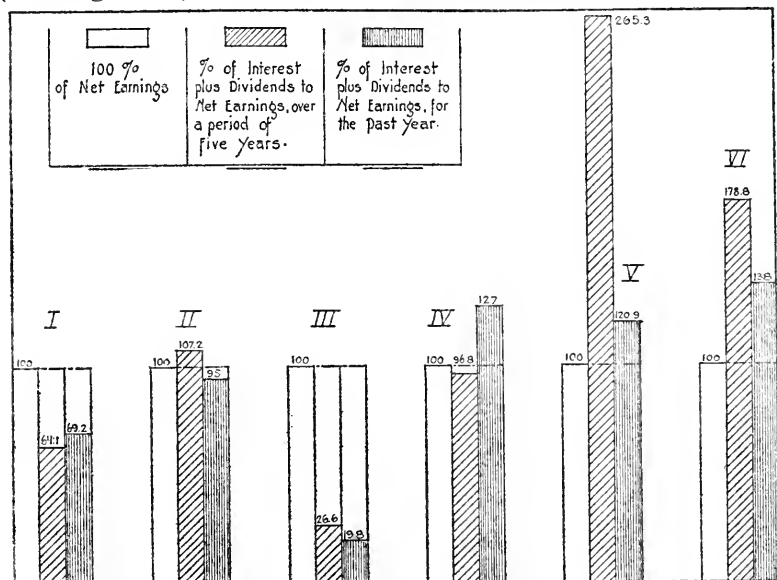


FIGURE 6.—Comparison of interest plus dividends actually paid, over a period of five years and for the past year, of six groups of roads, with 100 per cent of the net earnings of those roads.

would bring about total exemption from taxation in some cases in which taxable value certainly exists.

Physical valuation is not satisfactory as a sole method for the valuation of railroad property. It represents the cost of reproduction new, and a purchaser of one of the lumber railroads of the state would not give anything like the cost of reproduction for a road the value of which had largely departed with the cutting of the timber. Physical valuation is, then, only an aid in determining the market value of the property, possessing great significance in the case of the larger and more prosperous roads, but little significance in the case of some of the smaller roads.

The per cent of physical valuation to assessed valuation is greater for the small roads, indicating that they are not earning a fair return on the capital invested. The Wisconsin tax commission fixes a low valuation and the per cent of net earnings to assessed valuation is fair; the per cent of net earnings to capital invested would be a very much smaller sum.

Having considered these various factors of value, it can be asserted confidently that the factor of net earnings over a period of several years is vastly more significant than any other. It is fairly clear also that net earnings over a period of years are more significant than gross earnings and physical valuation. These considerations have governed the weighting of the several factors included in our rule. It is believed that the weights adopted are approximately correct and that, in any case, slight changes will not materially affect the result.

IV

Having grouped the roads in the above manner, determined the total valuation of each group, and fixed the factors of value and the weight to be assigned to each, the application of the rule is comparatively simple.

Following out the fourth process of the rule, the percentage of total gross earnings, on a five-year average, of all the roads in a group to the total valuation of the group, was figured; the percentage of total gross earnings for the past year, of all the roads in a group to the total assessed valuation of the group, was computed; and like percentages for net earnings on a five-years average, net earnings for the past year, and physical valuation.

Then the fifth process was performed. The gross earnings, net earnings, and physical valuation of each individual road in the group were capitalized at these various rates. For example, the gross earnings on a five-year average of each road in Group I were capitalized at the rate of 19.07 per cent. Gross earnings for the past year were capitalized at the rate of 20.25 per cent. Net earnings on a five-year average were capitalized at the rate of 6.76 per cent, net earnings for the past year at 6.55 per cent, and physical valuation at the rate of 77.60 per cent.

Carrying out the sixth process of the rule, the capitalized values so obtained were combined in a weighted average, giving the above-mentioned weights to the different factors.

Seventh, the percentage of assessed valuation to recapitalized-

and-weighted valuation, for each road of each group, was determined. It is evident that if the percentage of assessed valuation to recapitalized-and-weighted valuation is the same for all roads of a group, no road is discriminated against. For example, if the assessed valuation is 75 per cent of the recapitalized-and-weighted valuation in each case, then there is fairness between roads.

Eighth, the average of such percentages for the roads of each group, was calculated. This was done in order to secure a standard for the comparison of the percentages of the individual roads.

Ninth, the ratios of the individual road percentages to the group average were determined, for the roads of each group. These ratios, expressed in percentage form, constitute a series of relative numbers, in which figures above 100 indicate relative over-assessment, and figures under 100, relative under-assessment. When we have secured such a series of numbers for each group, we can see at a glance which roads are over-assessed and which under-assessed.

The following figures, which are merely illustrative, and not the actual figures for any group or road, will show how the method was applied. Suppose:

\$500,000,000 = the total tax valuation of the roads (six in number) in any group.

95,350,000 = average annual gross earnings of the group, for the past five years, which equals 19.07 per cent of the tax valuation.

101,250,000 = gross earnings of the group for the past year, which equals 20.25 per cent of the tax valuation.

33,800,000 = average annual net earnings of the group for the past five years, which equals 6.76 per cent of the tax valuation.

32,750,000 = net earnings of the group for the past year, which equals 6.55 per cent of the tax valuation.

388,000,000 = physical valuation of the roads in the group, which equals 77.60 per cent of the tax valuation.

The gross earnings, net earnings, and physical valuation of each individual road were then capitalized at the rate ascertained to hold good for the group as a whole. For example, suppose the following to be true of Road A:

\$100,000,000 = tax valuation.

94,425,000 = value (approximate) obtained by capitalizing the average annual gross earnings for the five years past, \$18,006,854, at the group rate, 19.07 per cent.

93,827,000 = value (approximate) obtained by capitalizing the gross earnings for the past year, \$19,000,000, at the group rate, 20.25 per cent.

96,153,000 = value (approximate) obtained by capitalizing the average net earnings for the past five years, \$6,500,000, at the group rate, 6.76 per cent.

106,870,000 = value (approximate) obtained by capitalizing the net earnings for the past year, \$7,000,000, at the group rate, 6.55 per cent.

87,628,000 = value (approximate) obtained by capitalizing the physical valuation \$68,000,000, at the group rate, 77.60 per cent.

Combine these recapitalized values in a weighted average, giving the correct weight to the five different factors as prescribed by the rule, and the following is the result:

Twenty	times	.....	\$94,425,000 = \$1,888.50 millions
Five	"	.....	93,827,000 = 469.14 "
Fifty	"	.....	96,153,000 = 4,807.65 "
Five	"	.....	106,870,000 = 534.35 "
Twenty	"	.....	87,628,000 = 1,752.56 "

Total \$9,452.20 millions

If this total is divided by 100, the resulting recapitalized-and-weighted valuation is \$94,522,000.

The original assessed valuation of this hypothetical Road A was \$100,000,000. It may be interesting to compare the assessed valuations of some of the actual roads with their recapital-

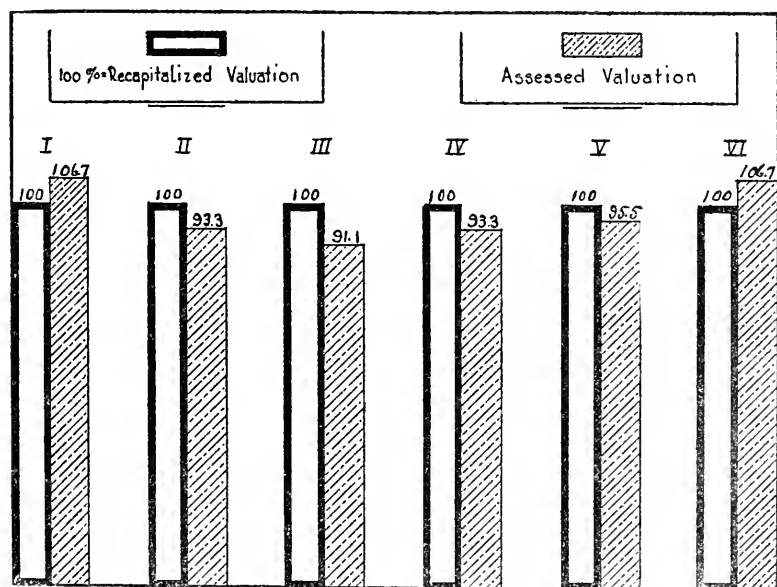


FIGURE 7.—Comparison of the assessed valuations of the six roads in Group I, with their recapitalized valuations.

ized-and-weighted valuations, before describing the application of the last three processes of the rule. Figure 7 gives the comparison of the assessed valuations of the individual roads in Group I with the recapitalized-and-weighted valuations. It is unnecessary to present the computations for all the groups, as Figure 7 is typical. This method was followed for each of the fifty roads of the state, except a few the data for which were incomplete.

V

The essential thing, however, in determining whether a road has been assessed with comparative fairness or not, is to find out whether the road's ratio of assessed to recapitalized valuation is greater or less than, or the same as, the average ratio for roads of that group. If it is greater, the road has been over-assessed. If it is less, the road has been under-assessed. If the ratio corresponds with the average for the group, the assessed valuation is fair. To arrive at a conclusion in regard to these facts, the last three processes of the rule were adopted.

Carrying out the seventh process of the rule, we find the percentage of assessed valuation to recapitalized-and-weighted valuation, for each road of the group. The following figures are obtained:

Percentage of assessed to recapitalized-and-weighted valuation.

	<i>Per cent</i>
Road I	106.7
Road II	93.3
Road III	91.1
Road IV	93.3
Road V	95.5
Road VI	106.7

Next, we ascertain from these figures the average percentage of assessed to recapitalized-and-weighted valuation for the group, finding it to be 97.8 per cent. This is the eighth step of the rule.

Ninth, we secure the ratio between each road-percentage and the group-percentage, 97.8. The figures thus obtained are:

Ratio of road-percentage to the average percentage for the group.

	<i>Per cent</i>
Road I	109.1
Road II	95.4
Road III	93.1
Road IV	95.4
Road V	97.6
Road VI	109.1

These ratios indicate that Roads I and VI have been over-assessed, Roads II, III, and IV under-assessed, and that Road V has been assessed at about the right amount. Figure 8 gives the comparison of the road-percentages with the group average.

My conclusion, therefore, is that a tax commission could use this rule—giving weight, as shown above, to the different factors—for

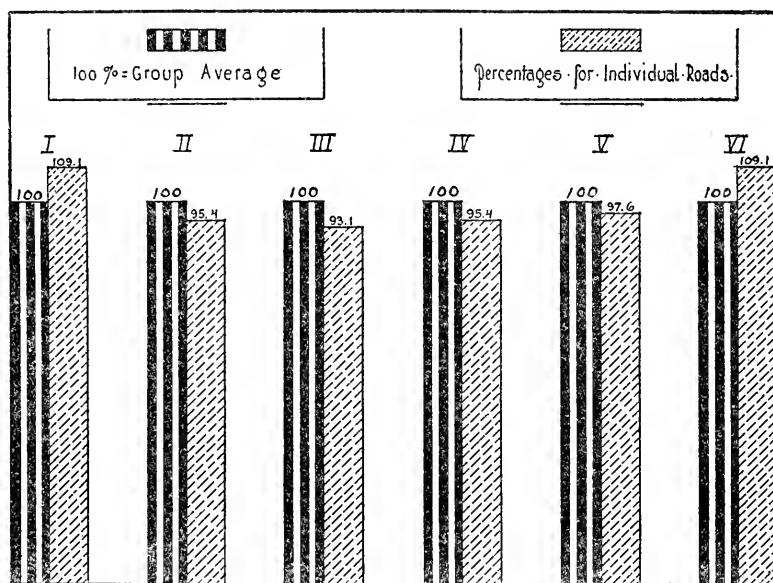


FIGURE 8.—Comparison of the individual road percentages (assessed valuation to recapitalized valuation) of the six roads in Group I, with the average per cent for the group.

the purpose of testing the comparative fairness of valuation as between roads in a group; such a test to be applied only after estimates of value have been established on the basis of the commission's knowledge of the condition and standing of the roads.

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SIX YEARS OF POSTAL SAVINGS IN THE UNITED STATES

Six years have passed since January 3, 1911, when the United States postal savings system, authorized by the act of June 25, 1910, first opened the doors of the post offices for the receipt of savings deposits. The opponents of postal savings assailed the plan as a socialistic proposal, which would place the government in the banking business and make it a dangerous competitor of existing banks. The proponents, on the other hand, looked upon it as a well-tried device that would draw idle money from hoards, cause the foreign population to keep their savings in the United States instead of remitting them so extensively to their native countries, and provide savings facilities for our large rural population, particularly that of the West and South, where banking facilities in the rural communities were often sadly lacking.¹ A trial period of six years should be sufficient to test the truth of these prophecies, and the present time, when all savings institutions are facing the great problems involved in a probable rise in the interest rate with the consequent depreciation of their bonds and mortgages of long maturities, is an opportune one to examine our experience in this venture. For convenience the subject may be discussed under the following heads, although a certain amount of overlapping in the discussion of the different topics will be necessary: (1) Administrative organization, (2) Depository post offices, (3) Depositors and deposits, (4) Investment of postal savings funds.

Administrative Organization

For "the control, supervision, and administration of the postal savings depository offices" and of the funds received on deposit, the act created a board of trustees somewhat analogous to the Postal Savings Bank Investment Board of the Philippines.² This Board of Trustees consists of three ex-officio members, the Postmaster General, the Secretary of the Treasury, and the Attorney

¹ The reader interested in the history of the postal savings movement in the United States leading to the legislation of 1910, in the debate in Congress over the subject, and in an analysis of the provisions of the act of 1910, will find them treated in the writer's article on "The United States Postal Savings Bank," *Political Science Quarterly*, vol. XXVI (1911), pp. 462-499.

² E. W. Kemmerer, "The Philippine Postal Savings Bank," *Annals of the American Academy of Political and Social Science*, vol. XXX (1907), p. 48.

General. These three officials were supposed to represent respectively the three important phases of the postal savings work: *i.e.*, administrative, financial, and legal. Wide discretionary powers were given to the Board of Trustees so that it might "feel its way" in developing the new system. The Treasurer of the United States is made treasurer of the board.

A few months experience with the new system showed that much delay was occasioned by the inability of the three members of the board to get together promptly when needed. Accordingly the Post Office Department Appropriation act of March 4, 1911 (section 5) amended the postal savings law by giving to the Postmaster General full authority with reference to the designation of postal savings depositories, the making of rules concerning the deposit and withdrawal of funds, and some other matters originally entrusted to the Board of Trustees as a whole. The investment and control of postal savings deposits continued to be entrusted to the board. During the year 1913 the administrative machinery of the postal savings system was reorganized and given a definite and permanent status in the Post Office Department, which it had previously lacked. On May 1, 1913, by administrative order of the Postmaster General, such part of the administrative business of the postal savings system as had up to that time been under the immediate supervision of the Postmaster General, together with the corps of employees doing the postal savings work, was transferred to the Bureau of the Third Assistant Postmaster General—the bureau in charge of the fiscal affairs of the Post Office Department—and a division was created in that bureau, to be known as the Division of Postal Savings, for the immediate charge of this work. Contemporaneously the Third Assistant Postmaster General was elected Secretary of the Board of Trustees and constituted its agent for all purposes connected with the administrative duties conducted through the central office in Washington.

Thus all [postal savings] business charged to the Post Office Department is performed in the Division of Postal Savings under the immediate supervision of the Third Assistant Postmaster General as an officer of the Post Office Department, and all business of the Board of Trustees is performed through or by the same official, either in his capacity as secretary or as agent of the Board for the performance of certain specified duties.³

³ *Annual Report Third Assistant Postmaster General, 1913, p. 28.*

Up to June 30, 1913, the employees of the central office of the postal savings system were paid out of a special fund appropriated for "establishing postal savings depositories." Beginning with the fiscal year 1914, however, the clerical positions in the Division of Postal Savings were made statutory, and the expenses of the division were made directly chargeable to the annual appropriation for the Post Office Department. At the time of the transfer of the Postal Savings System to the Bureau of the Third Assistant Postmaster General, a committee of Post Office Department officials was appointed for the purpose of making a study of the regulations, instructions, and forms in use by the postal savings system, and of recommending changes where they thought desirable. As a result of the committee's work many changes in procedure were drafted, some of the more important of which will be noted later.⁴

Depository Post Offices

The system was inaugurated in January and February, 1911, by the opening of one postal savings bank⁵ in each state and territory. From that time forward the work of extending the system to other places proceeded rapidly. By the end of the fiscal year 1913 banks had been opened in 12,151 post offices, including all presidential offices and about 4,000 offices of the fourth class, also in 667 branches and stations. This fiscal year showed the high-water mark in the number of banks. The department had moved too fast in opening new banks, particularly in fourth-class post offices. It was pointed out by Representative William H. Stafford, of Wisconsin,⁶ in congressional debate that of the 4,000 fourth-class post offices which had been previously designated as postal savings banks 3,000 either had no deposits at all or deposits of only one dollar. On the fee basis then used for compensating postmasters for their services in postal savings work, in

⁴ *Infra*, p. 65 *et seq.*

⁵ The postal savings laws and the official administrative orders, regulations, announcements, etc., with few exceptions, avoid the use of the term "bank" in referring to the post offices which receive postal savings deposits. A post office which receives such deposits is officially known as a postal savings depository, and a bank receiving postal savings funds on deposit from the postal savings system is known as a depository of postal savings funds. Fortunately the public need not follow these circumlocutions. In this paper a post office receiving deposits will be called a postal savings bank, and a banking institution receiving postal savings funds will be called a depository bank.

⁶ *Congressional Record*, Dec. 15, 1913, p. 928.

these 3,000 offices the average compensation allowed was 27 cents a year.⁷ Yet the auditors of the Post Office Department kept a separate account with each one of these offices, and monthly audits were frequent—all involving substantial expenses. During the fiscal year 1913-1914 postal savings functions were discontinued at 18 presidential offices, 2,753 fourth-class offices, and 8 branches and stations;⁸ and at the end of the fiscal year 1916, the last date for which detailed figures are available, the total number of postal savings banks was 8,421, classified as follows:⁹

First-class post offices	531
Second-class post offices	2,064
Third-class post offices	4,252
Fourth-class post offices	854
Branch post offices	176
Post-office stations	544
	<hr/>
	8,421

Notwithstanding the discontinuance of many postal savings banks in 1913-1914 and since, there are still a very large number of small and inactive banks. The annual report for the fiscal year 1915-1916 of the Board of Trustees gives for each city, town, and village having a postal savings bank, the amount of deposits held on June 30, 1916. An analysis of these figures made by the writer shows that 1,648 of the 8,421 postal savings banks had deposits of less than \$100 each; and of this number 509 banks did not have a single dollar of deposits, 259 had only \$1, 447 between \$2 and \$10, 299 between \$11 and \$25, and 581 between \$26 and \$99. These figures show that there is still ample room for the use of the pruning knife.

Depositors and Deposits

The provisions of the organic postal savings act concerning depositors and deposits conformed to the commoner practices in other countries. Accounts may be opened by any person ten

⁷ Representative Madden of Illinois, a member of the House Committee on Post Offices and Post Routes, *Cong. Rec.*, Dec. 10, 1913, p. 654.

⁸ A few of these changes were due to the discontinuance or the reclassification of the post offices. Some new banks were opened during the year, but notwithstanding this, the year showed a net reduction of 2,473 in their number, bringing the total down to 10,347. *Ann. Rep. 3d Assist. Postmaster Gen.*, 1914, p. 6.

⁹ *Ibid.*, 1916, p. 32. In January, 1914, the system was extended to Hawaii and Porto Rico.

years of age or over, but no person is permitted to have more than one account at one time. Deposits are receivable only in sums of a dollar or multiples of a dollar, provision being made, however, for the sale of postal savings cards for ten cents, which, when nine ten-cent postal savings stamps are pasted thereon, are receivable for one dollar. The original act limited the balance which any depositor could have to his credit (exclusive of accumulated interest) to \$500, and limited the amount he could deposit in any one month to \$100.

In the enactment of the postal savings law Congress left the decision as to the form in which the depositor's account should be kept to the discretion of the Board of Trustees. Chiefly for the purpose of keeping administrative expenses at a minimum, the board decided to use in place of the customary pass-book a simple form of certificate.¹⁰ Aside from the limitation of the amount a depositor can have to his credit, there is no limit to the number of certificates he may hold.¹¹

There is little that is noteworthy in the statutory provision concerning the withdrawal of deposited funds. Depositors are authorized to withdraw all or any part of their deposits, with accrued interest, upon demand, and under such regulations as the Board of Trustees may prescribe. The act of 1910 provided that the money for withdrawals was to be obtained by the local postal savings banks from the postal savings funds on deposit in the banks of the community in which the withdrawals were being made.

Nativity of depositors. The most striking fact in our six years experience with postal savings banks is the large extent to which they have been patronized by persons of foreign birth. The

¹⁰ On page 7 of the revised regulations which became effective July 1, 1913, these certificates are described as "non-transferable and non-negotiable certificates of deposit, to be supplied to postmasters in duplicate in fixed denominations of one, two, five, ten, twenty, fifty, and one hundred dollars, upon which shall be entered the name of the issuing office, the date of issue, the date on which interest begins, the name of the depositor, and the number of his account." On the back of each certificate is printed a ten-year interest table. There is furnished to each depositor an envelope, in which he may preserve his certificates. Upon this envelope is printed a certain amount of postal savings information, and a blank ledger for keeping account of deposits and withdrawals.

¹¹ With each deposit, the depositor secures an additional certificate. As a matter of convenience to the depositor, however, the post office will exchange a certificate of large denomination for a number of certificates of small denominations.

American postal savings bank is to a large degree an immigrant's bank—a situation, so far as I have been able to learn, peculiar to the United States. Mr. Carter B. Keene, Director of the Division of Postal Savings, in an address before the Savings Bank Section of the American Bankers' Association on September 26, 1916, said that at that time 375,000, or 60 per cent of the total number of depositors, were born outside of the United States, and that this 60 per cent owned three quarters of all the deposits.¹² Moreover, the proportion of foreign born among the depositors is increasing. About three years before, only 36 per cent of the depositors were foreign born and this 36 per cent owned 51 per cent of the amount on deposit.¹³

Analysing the situation portrayed by these summary figures, one notices that some nationalities patronize the postal savings system much more extensively than others. The figures for the close of the fiscal year 1915 concerning the nativity of postal savings depositors¹⁴ . . . are shown in column 1 of the table on page 52, of which columns 2 and 3, based upon the census figures for 1910—the latest available—have been added by the writer.

The last two figures in column 3 show that in proportion to population the deposits of the foreign born are about sixteen times as large as those of the native born. This comparison, however, involves the fallacy of an "age-selection" against the deposits by natives, since a much larger percentage of the foreign born than of the natives are 10 years of age or over and are therefore eligible to become depositors. This error in the crude figures may be largely estimated. The thirteenth census showed that about 75 per cent of the native whites were 10 years of age or over, and 97 per cent of the foreign born. Multiplying the crude figure 16 given above by $75/97$ we arrive at 12.4 as the correct figure showing the number of dollars per capita deposited in postal savings banks by the foreign born above 9 years of age, to each dollar per capita deposited by the native born above 9 years of age.

Viewed by countries the figures show striking differences, the natives of Greece being well in the lead with a proportion of deposits 16.4 times as large as their proportion of the total popu-

¹² *Commercial & Financial Chronicle*, A. B. A. Convention Supplement, Oct. 14, 1916, p. 192.

¹³ *Ibid.*, 1913, p. 195.

¹⁴ The figures are given, along with a large amount of other postal savings information, in a pamphlet issued by the Post Office Department in 1916, entitled *The United States Postal Savings System*, p. 6.

TABLE 1.—NATIVITY OF DEPOSITORS IN POSTAL SAVINGS BANKS.

Country of nativity	1	2		3
	Percentage of total deposits made by na- tives of each country	Number and percent- age of population of U. S. born in each country		Relative amount of de- posits held by natives of each country in pro- portion to their percentage ¹ of total population
		Number	Per cent	Per cent
		(000 omitted)		
Greece	1.8	101	0.11	16.4
Russia	20.7	1,732	1.86	11.1
Italy	14.2	1,343	1.44	9.9
Hungary	4.3	496	0.53	8.1
Austria	8.7	1,175	1.26	7.0
Sweden	2.2	665	0.71	3.1
Great Britain and colonies	8.8	3,768 ²	4.04	2.2
Germany	4.1	2,501	2.68	1.5
Other foreign countries..	7.0	1,565	1.68	4.2
Total foreign countries..	71.8	13,346	14.30	5.0
United States ³	28.2	86,000	85.70	0.3

¹ The figures in this column are obtained by dividing the figures in column 1 by the percentage figures in column 2.

² Covers only Great Britain, Ireland, and Canada.

³ Covers United States, Hawaii, and Porto Rico.

lation, Russia and Italy follow closely with proportions of 11.1 and 9.9 respectively, then comes Hungary with 8.1, and Austria with 7.0. The proportions for other countries fall far behind these figures.

Any satisfactory explanation of this situation would require a thoroughgoing investigation among the depositors themselves in the different communities most affected. With such evidence as is at present available, most of it coming from communications sent by postmasters and others to the Postal Savings Division at Washington, the best one can do is to name a few of the forces at work, without attempting to weigh them. Among these may be mentioned: (1) The distrust of non-government banks on the part of the foreign born population—a distrust easily understood when one bears in mind the extent to which our foreign born have

been robbed by persons (often of their own nationality) parading under the name "banker" or "bank." The exploitation of our thrifty foreign born population by many of our so-called "immigrant banks" has been a public disgrace.¹⁵ Although considerable improvement has been made in recent years in the regulation of these institutions, the situation is still far from perfect, and the distrust among the foreign born engendered by the early abuses still persists. (2) A second reason is the democratic atmosphere which pervades most post offices, in contrast with the aristocratic one that pervades most banks. Moreover, comparatively few banks have made a reasonable effort to attract this class of our population, while the postal savings system has.¹⁶ In receiving and sending letters and in transmitting money to their families or others in the homeland the foreign born are frequently brought to the post office. It would be rare that anything but the desire to deposit or withdraw money would bring the unskilled laborers among the foreign born to an American savings bank or commercial bank. Foreigners become familiar with the post office and not with the bank. (3) All of the first five countries in the list have postal savings banks, and immigrants from those countries have been familiar with such banks at home. (4) The European war through its interference with the ordinary means of sending small sums to Europe by international money orders and "immigrant banks," and through its depressing effect on the value of foreign moneys, has encouraged the foreign born to keep their savings in the United States.

Inasmuch as the avowed object of the establishment of postal savings banks in the United States was the encouragement of thrift, it is natural to ask: (1) How has the plan appealed to persons of different ages, and particularly how has it appealed to children, who represent the part of our population whose education in thrift would appear to be the most important? and (2) How has it appealed to our negro population, which, as a whole, and allowing for numerous worthy exceptions, is probably our most thriftless class?

¹⁵ Cf. *Report of Immigration Commission, on Immigrant Banks*, Sen. Doc. No. 381, 61 Cong. 2. Sess., pp. 109-124.

¹⁶ Circulars in 23 foreign languages explaining the postal savings system and its advantages have already been issued and widely distributed. These 23 foreign languages are designed to reach about 97 per cent of our entire foreign born population. *Third Assistant Postmaster General's Reports 1916*, p. 12.

Age grouping of depositors. No recent figures are available for the age grouping of depositors. An investigation of this subject, however, was made as of June 30, 1912, after the postal savings system had been in operation a year and a half. The result of that investigation has been furnished the writer by the Third Assistant Postmaster General, and is summarized in the following table, the last two columns of which have been added by the writer.

TABLE 2.
NUMBER AND PERCENTAGE OF DEPOSITORS, JUNE 30, 1912, BY AGE GROUPS.

1	2	3	4	5
Age groups	Number	Per cent	Per cent of total population above nine years of age in age group in 1910	Ratio of percentage of depositors above nine years of age in age group to percentage of total population above nine years of age in age group
10-14 years	25,108	10.3	12.7	.81
15-19 "	20,703	8.5	12.6	.67
20-24 "	32,529	13.3	12.6	1.06
25-34 "	70,672	29.0	21.1	1.37
35-44 "	45,488	18.7	16.2	1.15
45-64 "	40,977	16.8	18.7	.90
65 years and over	7,987	3.3	5.8	.57
Unknown	337	0.1	0.3	
Total	243,801	100.0	100.0	

The table shows that children from 10 to 14 years of age constitute about four fifths as large a percentage of the depositors as they do of the country's total population over 9 years of age; while persons from 15 to 19 years of age constitute about two thirds as large a percentage. The facts are considerably more favorable to children depositors than the figures show. This is true, first, because of the fact previously noted that there is a very small percentage of children among our foreign born population which constitutes much over half of the postal savings depositors, and second, because the postal-savings-bank stamp cards and stamps, representing savings of less than a dollar, are probably used mostly by children, and the savings represented by outstanding cards belonging to persons who have not yet opened their accounts do not figure in the records.¹⁷

¹⁷ This item would be too small to be worthy of mention were it not for the fact that a very large percentage of the persons who figure in the statistics as depositors have deposits of only one dollar.

The table shows emphatically that it is among the middle age groups that postal savings are most popular, the three age groups 25-34, 35-44, and 20-24, in their order, showing the largest proportions of depositors to the total population in the respective age groups.

Negro depositors. The colored population, although it lives chiefly in the sections of the country where non-governmental bank facilities are relatively lacking, has made little use of the postal savings system. As in the case of the age grouping of depositors, the only available statistics as to color grouping relate to June 30, 1912. At that time the total number of depositors was 243,801 and they were grouped as follows:

White	239,128
American negroes	4,006
Other negroes	456
American Indians	12
Chinese	23
Japanese	134
Other non-whites	12
<hr/>	
Total	243,801

This gives the whites 98.1 per cent of the total, and the American negroes 1.6 per cent, whereas their respective percentages in the total population in 1910 were 88.8 and 10.7. Evidently the postal savings system is accomplishing practically nothing in reaching the negro population. This would appear to be a particularly important field for it to cultivate.

Geographic Distribution of Deposits and Depositors

Closely related to the subject of the character of the depositors is that of their geographic distribution. In fact, when one says that the bulk of the depositors are foreign born, names the nationalities that preponderate, and says there are few negro depositors, he has to a large extent answered the question of their geographic distribution, and has said that they come largely from the cities of the industrial communities. A further analysis of this situation, however, is justified by its importance. Table 3 on page 57 and the following map (Map I) show the distribution by states. Briefly summarized the facts are as follows:

Distribution of depositors. Taking the country as a whole there was one depositor on June 30, 1916, to every 153 of the

MAP I.—NUMBER OF POPULATION TO EACH POSTAL SAVINGS DEPOSITOR IN THE
UNITED STATES, JUNE 30, 1916.

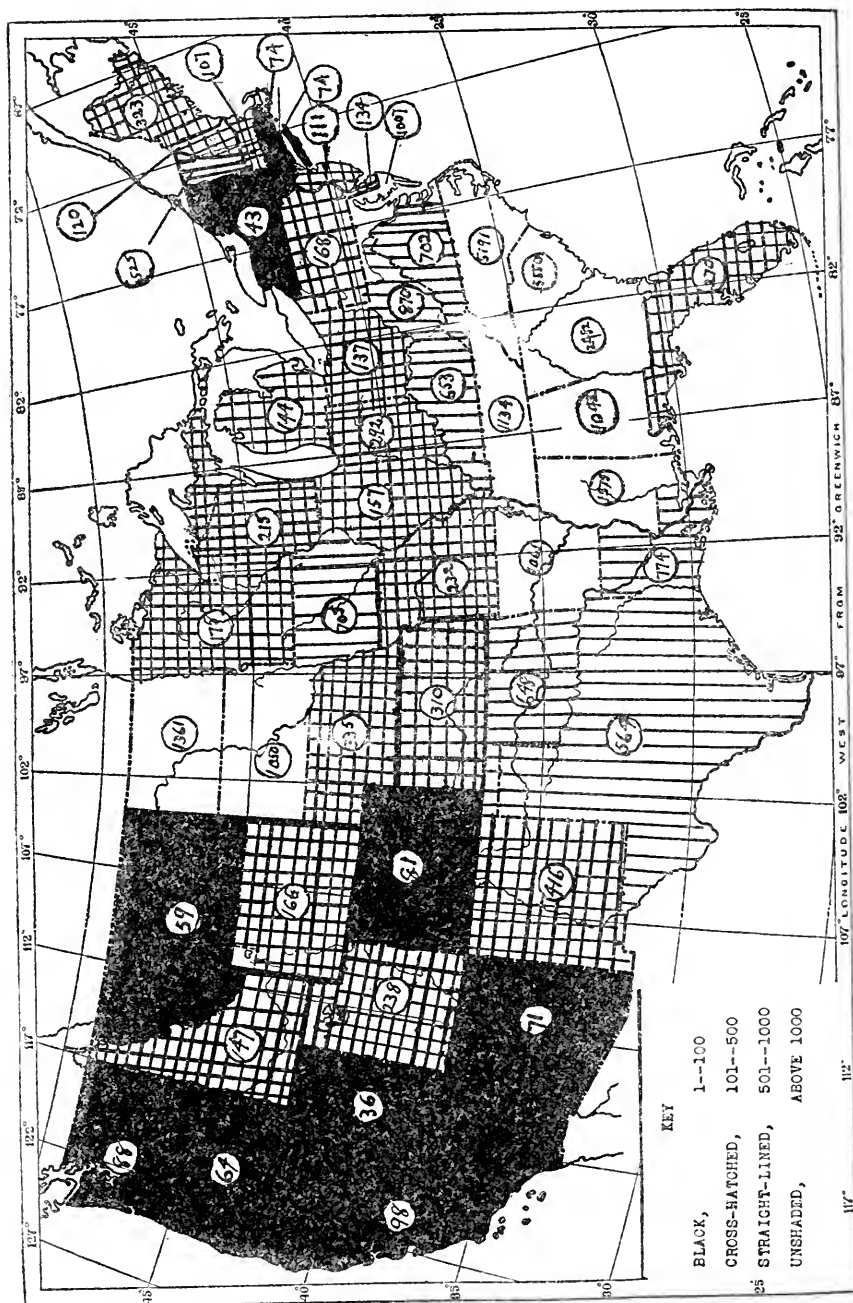


TABLE 3.—STATISTICS OF POSTAL SAVINGS BY STATES, JUNE 30, 1916.¹

States and territories	Population: census of 1910	Savings banks		Depositors		Deposits	
		Number of banks	Population per bank	Number of depositors	Population per depositor	Amount	Per capita: census of 1910
	(<i>000 omitted</i>)					(<i>000 omitted</i>)	
Alabama . . .	2,138	92	23,240	2,051	1,042	\$222	\$0.10
Alaska . . .	64	8	8,000	224	286	36	0.56
Arizona . . .	204	36	5,667	2,861	71	605	2.97
Arkansas . . .	1,574	102	15,300	1,484	1,061	229	0.14
California . . .	2,377	310	7,670	24,224	98	3,836	1.61
Colorado . . .	799	130	6,150	9,917	81	1,652	2.07
Connecticut . . .	1,115	125	8,920	15,057	74	1,934	1.73
Delaware . . .	202	22	9,180	1,510	134	173	0.86
D. of Columbia	331	9	3,680	2,723	122	373	1.13
Florida . . .	753	85	8,860	3,777	270	364	0.48
Georgia . . .	2,609	91	28,700	1,051	2,482	122	0.05
Hawaii . . .	192	10	19,200	469	469	38	0.20
Idaho . . .	326	84	3,880	2,215	147	381	1.17
Illinois . . .	5,639	486	11,600	35,979	157	5,992	1.06
Indiana . . .	2,701	292	9,250	9,251	292	1,377	0.51
Iowa . . .	2,225	268	8,300	3,155	705	527	0.24
Kansas . . .	1,691	298	5,670	5,451	310	741	0.44
Kentucky . . .	2,290	140	16,400	3,509	653	439	0.19
Louisiana . . .	1,656	79	21,000	2,139	774	292	0.18
Maine . . .	742	113	6,570	2,300	323	294	0.40
Maryland . . .	1,295	63	20,630	1,286	1,007	171	0.13
Massachusetts . . .	3,366	296	11,400	31,558	107	3,995	1.19
Michigan . . .	2,810	339	8,290	19,455	144	3,200	1.14
Minnesota . . .	2,076	265	7,830	11,852	175	1,951	0.94
Mississippi . . .	1,797	97	18,530	1,141	1,575	140	0.08
Missouri . . .	3,293	329	10,000	14,177	232	2,137	0.65
Montana . . .	376	85	4,420	6,389	59	1,306	3.47
Nebraska . . .	1,192	216	5,520	3,556	335	430	0.36
Nevada . . .	82	27	3,040	2,290	36	440	5.37
New Hampshire . . .	431	70	6,160	3,578	120	430	1.60
New Jersey . . .	2,537	200	12,703	22,762	111	2,806	1.11
New Mexico . . .	327	47	6,960	733	416	112	0.34
New York . . .	9,114	632	14,400	211,007	43	27,608	3.04
North Carolina . . .	2,206	83	26,600	425	5,191	46	0.02
North Dakota . . .	577	96	6,010	424	1,361	41	0.07
Ohio . . .	4,767	447	10,660	34,834	137	5,477	1.15
Oklahoma . . .	1,657	200	8,290	2,556	648	322	0.19
Oregon . . .	673	134	5,010	10,472	64	1,558	2.31
Pennsylvania . . .	7,665	566	13,500	45,579	168	7,108	0.93
Porto Rico . . .	1,118	44	25,400	1,770	632	76	0.07
Rhode Island . . .	543	41	13,240	7,370	74	796	1.47
South Carolina . . .	1,515	35	43,300	273	5,550	26	0.02
South Dakota . . .	584	114	5,124	556	1,050	75	0.13
Tennessee . . .	2,185	95	23,000	1,927	1,134	261	0.12
Texas . . .	3,897	357	10,920	6,908	564	770	0.20
Utah . . .	373	35	10,660	1,570	238	237	0.80
Vermont . . .	356	56	6,360	678	520	98	0.27
Virginia . . .	2,062	111	18,570	2,935	702	363	0.18
Washington . . .	1,142	165	6,910	12,963	88	2,119	1.86
West Virginia . . .	1,221	79	15,450	1,404	870	252	0.21
Wisconsin . . .	2,334	284	8,220	10,843	215	1,812	0.78
Wyoming . . .	146	33	4,425	879	166	168	1.15
Total . . .	91,972	7,701	11,940	602,937	153	86,020	0.94

¹ The table has been compiled from data obtained from the annual reports of the Third Assistant Postmaster General, and of the Board of Trustees of

population (using the census figures for 1910); but the proportion of depositors to the total population showed wide differences in different sections, varying from one depositor to every 36 of the population in Nevada to one to every 5,550 in South Carolina. There are ten states in which one per cent or over of the population are postal savings depositors, and these comprise a solid border of five states in the extreme western part of the country, the near-by states of Montana and Colorado, and three states in the East (New York, Connecticut, and Rhode Island). At the other extreme are ten states in which less than one tenth of one per cent of the population are postal savings depositors, and all of these states with the exception of the two Dakotas are south of the Mason and Dixon line, and, with the further exception of Arkansas, are east of the Mississippi River.

Distribution of deposits by states. The distribution of postal savings deposits by states at the end of the fiscal year 1916 is very similar to that of depositors. The table points to the following conclusions:

(1) The great bulk of the deposits are in comparatively few states. In only eight of the fifty-two states and other geographic districts mentioned did the total deposits exceed \$2,500,000; and these eight states (which in their order were New York, Pennsylvania, Illinois, Ohio, Massachusetts, California, Michigan, and New Jersey) held 70 per cent of the total deposits, the first four holding 54 per cent of the total.

(2) Viewed from the standpoint of amount on deposit in proportion to population there is a striking difference in different sections of the country. The amount on deposit per capita varied from \$5.37 for Nevada to less than two cents for South Carolina.

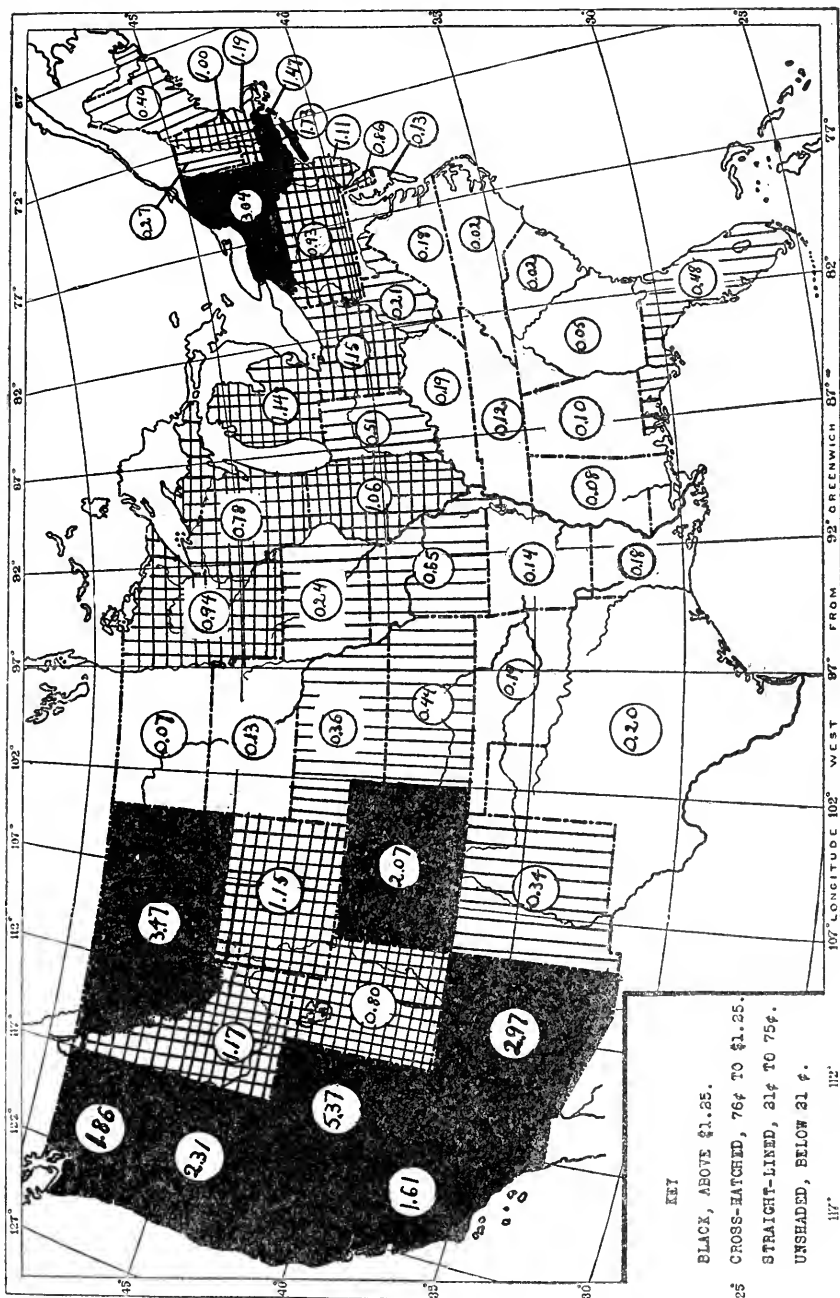
On the following map (Map II) the states (territories, etc.) are classified into four groups according to their per capita deposits on June 30, 1916. The groups are:

- I. Per capita deposits above \$1.25.
- II. " " " between 76 cents and \$1.25.
- III. " " " between 21 cents and 75 cents.
- IV. " " " below 21 cents.

In general it is in the southern states that the per capita deposits are smallest, and in the mining and lumbering states of

the Postal Savings System, also from the United States census reports. It is a cause of regret that the absence of satisfactory population figures for a later year than 1910 makes necessary the use of the census figures for 1910 in comparison with the postal savings figures for 1916.

MAP II.—PER CAPITA DEPOSITS IN POSTAL SAVINGS BANKS, JUNE 30, 1916.



the West, together with the manufacturing states of the East, that they are largest. The population of the Dakotas make scant use of the postal savings banks.

Distribution of deposits by cities. Passing from the distribution of deposits by states to that by cities and towns, we find figures published by the Third Assistant Postmaster General for the places having deposits of over \$100,000 on June 30, 1916. These places were seventy-six in number.¹⁸ According to the census of 1910, they had a population of 20.6 millions, or 22 per cent of the total population of the country. They had, however, 397,776 postal savings depositors, or 66 per cent of the total; and these depositors had to their credit \$57.3 millions, or 67 per cent of the total deposits. Analyzing the figures by cities and limiting ourselves to cities with total deposits of over \$200,000, we find the first fifteen cities ranked in the order of their per capita deposits as follows:

Rank	City	Population ¹⁹	Per capita deposits
		(000 omitted)	
1	Leadville, Col.	8	\$33.75
2	Butte, Mont.	42	19.93
3	Ironwood, Mich.	13	17.10
4	Pueblo, Col.	51	5.29
5	New York City	5,334	4.61
6	Tacoma, Wash.	103	4.32
7	Portland, Oreg.	260	4.08
8	Akron, O.	80	3.94
9	Detroit, Mich.	546	3.41
10	Toledo, O.	184	3.40
11	Bridgeport, Conn.	116	3.39
12	St. Paul, Minn.	237	3.20
13	Columbus, O.	205	3.14
14	Kansas City, Mo.	285	2.76
15	Duluth, Minn.	89	2.73

Some of the cities and towns whose total deposits are less than

¹⁸ Brooklyn and Long Island City, I have included in New York City, although they are given separately in the government figures. See *Ann. Rep. 3d Assist. Postmaster Gen.*, 1916, p. 35.

¹⁹ The populations used in compiling these per capita figures were in each case those for the latest date for which official estimates were available, and this means for all the cities except Leadville, Col., and Ironwood, Mich., the populations as of June 30, 1914; for the latter two cities the figures are for the census year 1910.

\$200,000 have very large per capita deposits. Among these the following may be mentioned:

Rank	City or town	Population in 1910 ²⁰ (000 omitted)	Per capita deposits
1	Roslyn, Wash.	3.1	\$40.72
2	Bisbee, Ariz.	9.0	21.48
3	Globe, Ariz.	7.1	14.18
4	Franklin, Pa.	9.8	13.97
5	Astoria, Ariz.	9.6	13.96
6	Barberton, O.	9.4	12.41
7	Hibbing, Minn.	8.8	12.34
8	Anaconda, Mont.	10.1	11.86
9	McKees Rocks, Pa.	14.7	11.36
10	Gary, Ind.	16.8	11.28

It is obviously to the small mining and industrial towns with their large foreign born populations that the postal savings system is rendering its greatest service.

Sizes of Individual Deposits and Deposit Balances and Sources from Which Drawn

It has already been mentioned that the Postal Savings act of 1910 limited the balance that any depositor could have (exclusive of interest) to \$500, and limited the amount which he could deposit in any one calendar month to \$100. These restrictions were made chiefly with a view to lessening the danger, which the banking interests so greatly feared, that the postal savings depositories would attract money away from the banks. With these restrictions in mind, we may consider the sizes of individual deposits and deposit balances and the sources from which they have been drawn.

Sizes of deposit balances. The Post Office Department publishes no figures showing the grouping of deposit balances according to size—information which it is desirable that the official statistics should furnish; but from its published statements a small amount of light on the sizes of individual balances can be gained. The average size of the deposit balances at the end of each of the six fiscal years during which the system has been in operation was as follows:

²⁰ Doubtless some of these places have had important changes in their population figures since the census of 1910; and the actual population figures for June 30, 1916, if available, would show in some cases, materially different per capita figures.

1911	.....	\$ 57
1912	.....	83
1913	.....	102
1914	.....	112
1915	.....	125
1916	.....	143

While this shows a healthy increase in the average balance, it throws little light upon the sizes of the items that make up these averages. Third Assistant Postmaster General Dockery said December 4, 1915: "We have now more than 30,000 depositors who have reached the limit—who have deposited all they are permitted to deposit under the postal savings law—and 22,000 of the 30,000 who have reached the limit of deposits are foreign born."²¹ This was exclusive of the deposits which had been withdrawn for investment in 2½ per cent postal savings bonds. On the other hand, the fact previously noted²²—that on June 30, 1916, there were 259 postal savings banks having only one dollar each, and 447 whose deposits ranged between \$2 and \$10—is evidence of a large number of petty accounts.

Sources from which funds deposited are withdrawn. From the earliest agitation for a postal savings system in the United States the debate over the advisability of such a system has centered largely in the question of the sources from which postal savings deposits would be derived. Bankers, as we have seen, almost unanimously opposed postal savings banks because they feared that the funds for postal savings deposits would be withdrawn or diverted from the banks, as they had been to some extent in Great Britain during the early days of the British postal savings banks. The proponents, on the other hand, had claimed that the funds would come chiefly from hoards, from increased savings, and from the deposit of funds which otherwise would be sent by the foreign born to the banks of Europe. Obviously it is impossible to describe in any quantitative way the sources from which the deposits have come. That is a topic of information which postal savings bank depositors—a proverbially distrustful class—naturally guard jealously. Such information as we have on the subject comes chiefly from the direct observations of postmasters and others actively engaged in the administration of the postal savings system, and from the testimony of bankers themselves as to the

²¹ *The United States Postal Savings System, op. cit.*, p. 8.

²² Page 49.

competition which they have experienced from postal savings banks.

In the first place it may be said that there is no evidence whatever that the postal savings system has to any appreciable extent proven a competitor of the banks. On the contrary it has been a feeder for the banks, and has proven a positive influence for the encouragement of thrift, in the interest of which the American Bankers' Association has for some time been conducting a vigorous and well-organized campaign. This fact has of late been generally admitted by the very bankers who formerly opposed the establishment of the postal savings system. For example, Mr. Edward L. Robinson, vice-president of the Eutaw Savings Bank of Baltimore, and chairman of the Committee on Postal Savings Bank Legislation of the Savings Bank Section of the American Bankers' Association, in a recent address before the Savings Bank Section of the American Bankers' Association, after referring to the "almost unbroken front of opposition from the banking interests" to postal savings legislation prior to 1910, said: "[After the system had gone into operation] it was at once evident that the system was not invading the territory occupied by other banks, but was actually drawing money out of hiding places and was making a strong and successful appeal, as was predicted, to the distrustful foreign element."²³

Mr. Carter B. Keene, Director of Postal Savings, informs me that the opinion of postmasters throughout the country, as revealed by their letters and reports, is almost unanimous in the conclusion that the great bulk of the deposits come from hoards, and from funds that formerly were sent abroad for deposit in the postal savings banks and other banks of Europe. The tarnished condition of much of the coin deposited, and the receptacles in which the money is brought for deposit, show that much of it has been buried or otherwise hoarded for long periods. Director Keene said in an address before the American Bankers' Association Convention in Boston in October, 1913:

A systematic canvass was once made by the Department to ascertain where the postal savings deposits were coming from, and no depositor was found who had transferred his account under normal conditions from a bank to the post office. On the contrary our files are full of reports from postmasters who explain the falling off of deposits by the fact that accounts are being transferred to local banks, and letters from bankers urging the extension of the service to points where they

are unable to reach hoarded savings are now too frequent to occasion comment. The postal savings system is a fitting school for other savings institutions. Our depositors are at first more concerned for the security of their savings than in what they may earn. They are thinking of the principal not the interest, and it is only after they have learned the rudiments of saving that the interest feature attracts them. . . . The banks then get the accounts.²⁴

Concerning the inroads made by the postal savings system into the former expensive practice of buying money orders payable to one's self as a means of securing government custody for savings, Third Assistant Postmaster General Dockery said in his annual report for 1915:

The use of the postal money-order service for savings purposes, in the absence of a postal savings system in this country, was quite general in the years preceding 1911, it having been ascertained that the value of money orders so purchased at first and second class offices during 12 months prior to March 1, 1908, was in excess of \$8,000,000. These investments were made solely because of the security afforded moneys so intrusted to the government. With the establishment of the postal savings system the money orders purchased for savings purposes were gradually cashed and the use of the money-order service for this purpose thereafter was negligible.²⁵

In this connection the experience of six years of postal savings should be described with reference to the fear early expressed that the existence of postal savings banks would encourage runs on the banks in times of great financial distrust.²⁶ With such depositories for the safe keeping of money everywhere available, it was urged, the timid would withdraw their deposits from banks on the slightest provocation and deposit them at the post offices. Since the enactment of the postal savings law there has been no national financial crisis of a character to put this question to a severe test. The crisis of August, 1914, was not one that reached the masses of the people. Up to date there have been very few instances recorded in which money has been withdrawn in any considerable amount from banks, in time of stress, for deposit in postal savings banks; and most of these instances occurred in towns where confidence in local banks was dealt a blow by the

²⁴ *Com. & Fin. Chron.*, A. B. A. Conv. Suppl., Oct. 18, 1913, p. 195.

²⁵ *Report*, p. 15. It was also pointed out that postal savings depositors whose balances had reached the limit of \$500, fixed by the law in 1910, were again resorting to this device for entrusting their savings to the government.

²⁶ Cf. Kemmerer, "The United States Postal Savings Bank," in *Political Science Quarterly*, vol. XXVI (1911). pp. 497-498.

failure of one of their number. Four cases of this kind were described in a statement prepared by the Post Office Department and printed in the *Congressional Record* of December 15, 1913.²⁷ The cities were Ironwood, Mich., Lowell, Mass., McKeesport, Pa., and Pittsburgh, Pa. It will be sufficient to quote from the description of the last case, which was typical.

The First-Second National Bank of Pittsburgh, Pa., was closed on July 7, 1913. The postal savings receipts for the week beginning on the day of the failure was \$19,624, a larger sum than had been deposited in an entire month. The postmaster, in commenting on the situation July 17, said: "Very many of the depositors wanted to leave large sums, ranging from \$1,000 to \$9,000. Some persons who came to the office when they learned that only \$100 could be accepted did not open an account. While no record was kept of the amount offered and refused, there is no doubt but what the aggregate was in excess of \$100,000."

Cases were also reported of two bank runs which led to a considerable offering of funds at the postal savings banks. One was in Youngstown, Ohio, in August, 1913, and the other was the case of the United States Trust Company in Washington, D. C., November 21, 1913. This last run lasted from noon of one day till noon of the next. "During the six days prior to the run 30 postal savings accounts were opened in the Washington post office and \$3,413 was received. In five days after the run 147 accounts were opened and \$15,650 was received, and during this period \$24,261 was rejected on account of the monthly limitation."²⁸

In all of the above instances of the withdrawal of funds from local banks the money withdrawn was immediately redeposited by the postmaster in local banks, and in most, if not all, of the cases, existing local depository banks for postal savings funds already had deposited with the government a sufficient margin of collateral to qualify at once for the new deposits.

Limitations on the size of deposits and deposit balances. This brings us to the question which has given rise to the most discussion since the enactment of the law of 1910: *viz.*, that of the desirability of raising or removing entirely the limitations imposed upon the amount that can be deposited by a depositor in any one month, and upon the total balance which a depositor may have to his credit. In harmony with the practices in many other coun-

²⁷ Pp. 926-927.

²⁸ *Ibid.*, p. 927.

tries and with the wishes of the banking community, narrow limitations were imposed by the act of 1910: *viz.*, \$100 as the maximum amount that could be deposited by any depositor in a month, and \$500 and accumulated interest as the maximum balance which a depositor could have.

These limitations soon proved to be onerous and a number of bills were early introduced in Congress looking toward lightening them. The first of these bills to come into prominence was the Moon bill²⁹ which contained provisions amending the organic postal savings act in a number of important particulars, one of which—the most controverted one—was concerned with changes in these limitations. The bill as originally introduced provided for the removal of all limitations upon the amount that any person could deposit in a postal savings bank at any time and upon the balance he might have to his credit, but limited the amount upon which he could draw interest to a maximum of \$1,000. The privilege of making non-interest-bearing deposits in postal savings banks, in unlimited sums, above the maximum upon which interest is allowed, is granted in a number of countries, notably Italy, Sweden, the Netherlands and its colonies, and the Philippines.³⁰ The Moon bill took the course through Congress usually taken by important bills which ultimately receive congressional approval. It was debated at intervals from December 15, 1913, to August 28, 1914, was amended in the House and in the Senate, referred to a conference committee by which the differences were compromised, and was finally passed by Congress at the end of August. In its final form the bill removed the limitations on the amount that could be deposited by a person in any month, left the maximum interest-bearing deposit \$500, and authorized the Board of Trustees in its discretion to “accept additional deposits not to exceed in the aggregate \$500 for each depositor, but upon which no interest shall be paid.” The bill was sent to the President for his signature September 1, but was vetoed by him because of one of its provisions authorizing the deposit of postal savings funds in banks not members of the federal reserve system. “With most of the provisions of the bill,” the President in his veto message declared himself “in hearty accord.”³¹

²⁹ H. R. 7967 of the 63d Congress, introduced September 6, 1913, by Representative Moon, of Virginia.

³⁰ In Belgium there is no limit to the amount which can be kept on deposit, at interest, but when the deposit balance exceeds 3000 francs the interest rate on the whole balance is reduced from 3 per cent to 2 per cent.

³¹ House Doc. No. 1162, 63 Cong., 2 Sess. This document contains the bill and the President's veto message. *Cf. infra*, p. 81.

Inasmuch as two years later legislation providing for the lightening of the restrictions upon postal savings deposits was passed, and as the chief debate over the question of policy occurred in connection with the vetoed bill, it will be well to summarize briefly at this point the arguments advanced, during the various congressional debates (1913-1916), on both sides of the question.

Arguments for lightening limitations on deposits. The chief arguments advanced in favor of the change were as follows:

1. The presumption is in favor of freedom from artificial restrictions in such a matter as permitting the public to deposit its savings in any legally authorized and safe agency for receiving deposits. In the original legislation the restrictions were imposed to protect banks from what many feared would prove a dangerous competition when the postal savings banks were opened. The fact that experience showed that the bulk of the postal savings deposits had come out of hoards and from persons who were not depositors at all in the regular banks made it clear that the *raison d'être* of the limitations was not a sound one, and that they should be removed, or, at least, greatly lightened. It may be pointed out in this connection that there are usually no legislative limitations on the size of interest-bearing savings accounts in commercial banks, and that the few such limitations which existed in the case of mutual and stock savings banks during the period of this controversy were more liberal than the existing postal savings act, and, with the exception of Massachusetts, were more liberal than those proposed in the original Moon bill.³²

2. The second argument was that the restrictions were not only resulting in the keeping in hoards of the millions of dollars of savings of postal savings depositors which were in excess of the \$500 maximum, but also of many millions more representing the savings of persons who would deposit nothing in the postal savings banks if they could not deposit all. It has been previously pointed out that in 1915 more than 30,000 depositors had reached the \$500 limit, and that of this number 22,000 were foreign born. The Postmaster General said in his annual report for 1913: "A conservative estimate indicates that more money has been refused by the postal savings system than has been ac-

³² A table showing by states the statutory restrictions on the amount that savings banks may receive from depositors is published in the *Congressional Record* for August 28, 1914, p. 14,382. Of the 48 states (and the District of Columbia) 36 had no restrictions whatever, and three of the other states merely authorized the banks to impose restrictions if they should desire.

cepted.”³³ Director Reed of the Postal Savings System in 1913 stated it as his belief that not less than \$30,000,000 in postal savings deposits had been turned away because of the \$500 limit. “Sums as large as \$25,000,” said Director Reed, “have been brought to us in old tea kettles, stockings, and what not else in the way of queer receptacles, and when we had to refuse to receive more than \$500 it went back into the nooks and corners, cellars, and underground, where it came from.”³⁴ Third Assistant Postmaster General Dockery told the writer that it was the testimony of postmasters throughout the country, over and over again, that if a foreigner could not deposit his entire savings at once he commonly refused to deposit any.³⁵

3. A third argument related to the expenses of administering the system. During the first two years the postal savings system was run at a heavy loss to the government—a loss computed at about \$1,000,000 down to December, 1913;³⁶ but since that time the records of the system have shown a net profit for each year. The Post Office Department took the position that if the limitations on deposits could be removed or greatly lightened, and particularly if non-interest-bearing deposits could be authorized, the deposits would be greatly increased, to the great relief of the deficit.

Arguments against removal or lightening of restrictions on deposits:

1. During the debates in Congress concerning alterations in the restrictions on postal savings deposits, the argument in the opposition that played the chief role—an argument which underlay many of the others—was that the changes proposed would make the postal savings system a stronger competitor of existing banks. There was a great deal of opposition on the part of bankers for this reason, and the banking community made its opposition felt in Washington.

It was claimed that, even if the postal savings system had not proven a competitor to the banks under the existing limitations on deposits, it did not follow at all that it would not prove a competitor when the limitations were lightened or removed. Senator Weeks, of Massachusetts, feared that the raising of the

³³ Page 27.

³⁴ Quoted in the *New York Evening Post*, Feb. 13, 1913.

³⁵ Cf. on this subject *The United States Savings System*, *op. cit.*, pp. 41-51.

³⁶ *Cong. Rec.*, Dec. 15, 1913, p. 923.

limits would put the postal savings system into competition with the mutual savings banks of the East,³⁷ and Senator Lodge, of Massachusetts, thought that the proposals were a move in the direction of putting the government into competition with the banks in the savings bank business.³⁸ Senator Gallinger, of New Hampshire, had received letters from officials of the savings banks in his state making a very earnest protest against the House proposal that there should be no limit on non-interest-bearing deposits.³⁹

2. A second objection was the claim that the raising of the deposit limit and particularly the allowance of large or unlimited non-interest-bearing deposits would open the door to the fraudulent evasion of debts and taxes. According to a decision of the Attorney General's Office, deposits in postal savings banks are exempt from attachment and execution for debt. In December, 1915, and during the consideration of the bill to raise the limit of interest-bearing deposits to \$1,000 and to authorize non-interest-bearing deposits up to another thousand dollars, Representative Steenerson, of Minnesota, drew a picture of a man with a wife and five or six children over ten years of age, each depositing \$2,000 in the postal savings bank, and escaping creditors to the total amount deposited.⁴⁰ He raised the question as to whether a lower limit than the one proposed should not be fixed for minors, but did not urge the point for he admitted that the evidence so far available was that minors were not using the postal savings banks very extensively, and that comparatively few of them who did use it would have deposits of over \$1,000. Senator Smoot, of Utah, in the course of debate on the earlier bill, said there was one class of people who would go to the limit of \$2,000. "I have received a number of letters," he said, "stating that there were people who used the postal savings banks, depositing their money in the post offices of the country, with the purpose of preventing the money from being garnisheed; . . . and they felt perfectly safe about keeping it from their creditors."⁴¹ Senator Sherman, of Illinois, said that he also had received many complaints on this subject from a great variety of people.⁴²

Postal savings deposits, being debts of the United States gov-

³⁷ *Cong. Rec.*, April 14, 1914, p. 6672.

³⁸ *Ibid.*, April 15, 1914, p. 6727.

³⁹ *Ibid.*, April 14, p. 6670; and April 15, p. 6725.

⁴⁰ *Ibid.*, Dec. 17, 1915, p. 433; and Jan. 6, 1916, p. 618.

⁴¹ *Ibid.*, April 27, 1914, p. 7303.

⁴² *Ibid.*, April 27, 1914, p. 7303.

ernment, are exempt from taxation under section 3701 of the revised statutes which provides that "all stocks, bonds, treasury notes, and other obligations of the United States shall be exempt from taxation by or under state or municipal or local authority." Senator Hitchcock, of Nebraska, thought that the bill, if passed, would encourage tax dodging through the withdrawal of money from ordinary banks just before assessment day and its temporary deposit in postal savings banks.⁴³

The tax-dodging argument apparently did not make a very strong appeal. The facts that the interest rate proposed to be paid by the government was but 2 per cent on the first thousand dollars, and nil on the second, the proposed limitation to \$2,000 on the total amount that could be deposited, the ease with which a would-be tax dodger could dodge taxes on cash funds without recourse to postal savings deposits, and the fact that federal, state, and city bonds paying higher interest rates than postal savings deposits were exempt from taxation—all of these facts weakened decidedly the appeal of the tax-dodging argument.

As to the argument that the raising of the deposit limits would encourage evasion of debt, the proponents of the higher deposit limit argued that there had been very little evidence of such evasion under the old limits, and that the new ones were not high enough to make the danger a serious one. Furthermore, said Senator Bryan, of Florida, who was sponsor for the bill in the Senate, the question of whether the additional deposits authorized by the proposed legislation should be exempted from attachment for debt and from taxation is a separate question to be considered by itself.⁴⁴ Such rights of exemption were not an essential part of the proposal to raise the deposit limits.

3. A third argument in opposition was urged by Senator Weeks, of Massachusetts. It may best be stated in his own words:

I feel perfectly sure that if this is undertaken you will see men from time to time dropping into the country post office and depositing their money where the postmaster has no facilities for caring for it, having no safe or any other means of protecting deposits. . . . [They will do so] not for the purpose of saving the money, not for the purpose of getting interest on it, but simply for the purpose of leaving it there for safe keeping until it is wanted.⁴⁵

These were the only arguments worthy of mention advanced

⁴³ *Cong. Rec.*, April 27, 1914, p. 7304.

⁴⁴ *Ibid.*, April 28, 1914, p. 7360.

⁴⁵ *Ibid.*, April 27, 1914, p. 7302.

in the Sixty-third and Sixty-fourth Congresses, on either side of the broad question of raising the deposit limits.

Limits on deposits raised in 1916. As previously noted, the veto by President Wilson of the postal savings bill of 1913-1914 (H. R. 7967) had no reference to the provisions of the bill raising the limits on deposits. In the next session of Congress a new bill providing for the raising of the limits was introduced by Representative Moon. By this time the Postal Savings Bank Legislative Committee of the Savings Bank Section of the American Bankers' Association had withdrawn its opposition to the legislation.⁴⁶ With the bankers' organized opposition removed, the proposed legislation had fairly clear sailing, and the bill (H. R. 562) became law by the signature of the President on May 18, 1916. The new act repealed the provision of the organic law which imposed a limit of \$100 on the amount that could be deposited in one calendar month, raised the interest-bearing limit from \$500 to \$1,000, and provided "that the Board of Trustees may, in their discretion, and under such regulations as such Board may promulgate, accept additional deposits not to exceed in the aggregate \$1,000 for each depositor, but upon which no interest shall be paid."

Notwithstanding the efforts that were made by the post office authorities to have this latter permissive legislation passed, and the strong case that was made in its favor, the Board of Trustees have not yet seen fit to exercise the authority therein granted to receive non-interest-bearing deposits up to \$1,000. The writer has been unable to obtain any official explanation of their inaction. Director Keene of the Division of Postal Savings, referring to the matter in an address at the American Bankers' Association Convention, September 26, 1916, merely said, "The Board of Trustees has not thus far accepted the non-interest-bearing accounts."⁴⁷

⁴⁶ The Committee reported to the Savings Bank Section of the American Bankers' Association, September 7, 1915: "It is understood that the Sixty-fourth Congress will enact legislation raising the limit of interest-bearing deposits to \$1,000 and giving discretionary powers to the Board of Trustees to accept an additional \$1,000 without interest. From the knowledge acquired by your committee in its efforts to have the original Moon bill amended, and from a frank interchange of views with the Director of the Postal Savings System, we feel that the desire of the Trustees for this increase of authority is not unreasonable and will not work any hardship upon our savings banks. . . ." *Com. & Fin. Chron.*, A. B. A. Conv. Suppl., Sept. 18, 1915, p. 181.

⁴⁷ *Com. & Fin. Chron.*, A. B. A. Conv. Suppl., Oct. 14, 1916, pp. 191-192.

The Third Assistant Postmaster General in his annual report for 1916 (dated September 30), after saying that the previous limitations "greatly retarded the growth of the system and restricted the scope of its usefulness," refers to the amendment as follows:

By the terms of the amendment a person may now deposit any number of dollars, and at any time, until the balance to his credit amounts to \$1,000. The effect of the liberalizing legislation was an immediate and pronounced increase in postal savings deposits. As the advantages of the new law become known the accumulated hidden savings of the country flow to the postal banks and are there restored to the circulating medium.⁴⁸

In its annual report dated December 1, 1916, the Board of Trustees use almost the same language. Both reports strangely ignore the question of receiving non-interest-bearing deposits.

Growth of deposits. Since the inauguration of the postal savings system on January 3, 1911, the growth of deposits has been continuous, and this growth (as just noted) has recently been stimulated by the raising of the limitations and by conditions created by the European war. Laborers in the United States have been very prosperous during the past two and a half years, and the situation in Europe has not been favorable to the sending of money across the water for safe keeping. The following figures show the balances on deposit in the postal savings banks at the end of the fiscal year since the system was inaugurated, and the balance for November 10, 1916—the latest date for which figures are available.

TABLE 4.—GROWTH OF POSTAL SAVINGS DEPOSITS, 1911-1916.

Fiscal year ending June 30	Amount	Percentage increase over preceding date
	(000 omitted)	
1911	677 ¹	2900
1912	20,237	67
1913	33,819	28
1914	43,444	51
1915	65,685	31
1916	86,020	26
Nov. 30, 1916 ²	108,500	

¹ Six months only.

² Five months only.

Interest paid on postal savings deposits. The act of 1910 provided (section 7) that "interest at the rate of two per centum

⁴⁸ *Ann. Rept. 3d Assist. Postmaster Gen.*, 1916, p. 7.

per annum shall be allowed and entered to the credit of each depositor once in each year, the same to be computed on such basis and under such rules and regulations as the Board of Trustees may prescribe; but interest shall not be computed or allowed on fractions of a dollar." Although interest rates prior to the European war ruled higher in the United States than in most advanced countries, this rate of 2 per cent is the lowest one to be found in any postal savings system in the world.

In framing rules and regulations concerning the payment of interest to depositors, the Board of Trustees has been very exacting. It early decided that compound interest should not be allowed. A depositor, however, may withdraw interest payable, and then immediately redeposit it as principal. This ruling of the board seems petty. Remembering the legal limitations on maximum deposits, and the provision of the law that interest cannot be paid on fractions of a dollar, it is difficult to see justification for this unusual ruling against compound interest. That it is an item of considerable importance will be seen from the fact recently cited by the Third Assistant Postmaster General, that interest allowed depositors from the beginning of the postal savings system to August 31, 1915, amounted to \$1,467,604, of which amount \$877,412 had been applied for and paid by postmasters, and the remainder, \$590,192, had not yet been applied for,⁴⁹ and consequently was not drawing interest. The hardship which it works is greater since the interest-bearing limit has been raised from \$500 to \$1,000.

A second ruling, and one of much more serious moment to depositors, is that no interest shall be paid on money which remains on deposit for less than a year, and no interest shall be allowed for fractions of a year even after the money has been on deposit a full year. There is a certain amount of irony in the following quotation from the 1914 annual report of the Third Assistant Postmaster General:

Interest on deposits [of postal savings funds] in banks is computed on the basis of average daily balances. . . . Interest on postal savings certificates is computed on the basis of deposits which have remained for one or more full years from the first day of the month following the month in which the deposits were made.⁵⁰

⁴⁹ *The United States Postal Savings System*, pp. 13-14.

⁵⁰ *Report*, p. 6. Furthermore, it has been ruled that a depositor who moves away from the town or city in which his postal savings account is held, cannot transfer his account to his new place of residence, before the end of his

The amount of interest of which these regulations deprive depositors every year is large. Take the year 1916 for example. The fiscal year began with a balance to the credit of depositors of \$65,684,708 and ended with \$86,019,885. The mean deposit balance was therefore \$75,852,296. At 2 per cent per annum the interest on this sum would have been \$1,517,046. As a matter of fact, the interest "allowed and entered to the credit of depositors" was but \$964,187, or 1.27 per cent on the mean annual balance.

On the other hand, aside from the 5 per cent reserve kept with the Treasurer of the United States, the government deposited practically⁵¹ all of its postal savings funds in banks at interest at the rate of 2½ per cent per annum on average daily balances. The interest received in these bank deposits for 1916 was \$1,764,368. Adding to this the \$34,966 received on the 2½ per cent bond investments, one arrives at \$1,800,000 (in round numbers) as the interest earned for the year. This represents an average daily balance, drawing interest, of \$72,000,000.⁵² This sum came entirely from depositors, but for the same period the sum on which interest was allowed and entered to the credit of depositors was but \$48,209,350, or 67 per cent of that upon which the government received interest. Viewed in another way, if the government had paid its 2 per cent to depositors on the same sum (less the 5 per cent reserve) as that upon which it received its 2½ per cent it would have paid depositors \$1,516,000 instead of \$964,187.

The explanation of the great discrepancy between interest paid and interest received consists chiefly in the fact that depositors forfeit their accumulated interest by withdrawing substantial sums before the end of the year interest-period. Third Assistant Postmaster General Dockery recently cited the following figures relating to this subject before a committee of the United States Senate:

Sixty-two per cent of the deposits are withdrawn before they have been on the deposit one year; 53 per cent of the 38 per cent that remains is withdrawn within the second year; and of the 18 per cent that still remains, 48 per cent is withdrawn within the third year,

"deposit year," without forfeiting his accumulated interest. He can make the transfer only by closing his old account, and opening an entirely new one at his new place of residence.

⁵¹ A small amount was invested in 2½ per cent postal savings bonds, but the entire income on these bond investments for the year 1916 was only \$34,966.

⁵² On this basis the total average daily balance (inclusive of the 5 per cent reserve at Washington) would have been about \$75,800,000.

leaving approximately only 9 per cent of the deposits in the custody of the Government at the end of the third year.⁵³

As a matter of fact the interest rate paid is so low that it makes a very weak appeal to the class of people who deposit in the postal savings banks. Their motive is primarily security. The government is now realizing large profits from the postal savings system⁵⁴—for 1916 the estimated profit was \$481,816⁵⁵—and this profit is coming from a class of people in the community from whom it is bad social policy to take it, *viz.*, from the thrifty poor. Of course it would be administratively impracticable to pay interest to depositors on average daily balances. Would it be expecting too much, however, to ask for our postal savings depositors the allowance of interest on half-yearly or even quarterly balances? Moreover, is it unreasonable to ask the Board of Trustees in view of the nomadic character of our foreign born population which patronizes the postal savings system most, to devise a simple system of transfer by which a depositor who is changing his place of residence may transfer his postal savings account without forfeiting his accumulated but as yet undue interest?

Investment of Postal Savings Funds

The most difficult problem which Congress had in formulating its postal savings plan in 1910 was that of the investment of the deposited funds. In most countries postal savings funds are invested in the public debt, but such a disposition of them in the United States was out of the question because the United States public debt was small and was not looked upon as permanent, and because most of it was already tied up as security for national bank note circulation. There was a widespread belief both in Congress and outside that any feasible plan for the investment of postal savings funds must meet five requirements: (1) The investments must be safe. (2) Either all or a substantial proportion of them must be payable on demand since the postal savings deposits were to be demand deposits. (3) The investments must yield a sufficient rate of interest to pay the interest due to depositors and the expenses of administration. (4) The funds

⁵³ *The United States Postal Savings System, 1916, op. cit.*, p. 5.

⁵⁴ The first two years the system was run at an estimated loss of \$1,000,000. Since that time every year has witnessed a substantial net profit to the government.

⁵⁵ *Board of Trustees, Annual Report of the Postal Savings System, 1916* (House Doc. No. 1433, 64 Cong. 2 Sess.), p. 61.

must be kept for the most part in the local communities where the deposits are received. The idea of the desirability of keeping "the money at home" was almost a fetish both among the advocates and the opponents of the postal savings legislation. Local communities throughout the country under the leadership of local bankers and of the postal savings legislative committee of the Savings Bank Section of the American Bankers' Association were prompt to inform their representatives in Congress that, if postal savings banks were to be established, they desired the deposited funds to be kept at home, and at all costs to be prevented from flowing to Wall Street. (5) The investment must take such a form as to make the postal savings system constitutional. In the Senate the postal savings bill had been vigorously attacked on the ground of unconstitutionality. It was declared that the avowed object of the bill was to encourage thrift, and that the Constitution conferred upon Congress neither directly nor by implication the right to create governmental machinery for that purpose. The advocates of the bill of course rested their case chiefly upon the doctrine of implied powers, and they found authority for such legislation implied in the power to "coin money" and "regulate the value thereof," the power to "regulate commerce . . . among the several states," the power to "establish post offices and post-roads," and, finally and chiefly, upon the power "to borrow money on the credit of the United States." Inasmuch as the deduction of constitutional authority to establish a postal savings system from all the above-mentioned powers, except the last, seemed rather weak even to the advocates of postal savings banks, the bill in its later stages was modified so as to bring into prominence the right of the United States government to borrow postal savings funds for national needs, both normal needs and emergency needs.

This brief explanation will give the reader the underlying philosophy of the investment features of the act,⁵⁶ which were briefly as follows: Postal savings funds were divided into three parts (section 9 of act): (1) A 5 per cent reserve fund to be kept in lawful money in the Treasury of the United States; (2) a sum not exceeding 30 per cent of the amount of postal savings funds, which "may at any time be withdrawn by the Trustees for investment in bonds or other securities of the United States";

⁵⁶ The debate in Congress over the constitutionality of the bill, with citations, is discussed at some length in the article by the writer previously cited, in the *Political Science Quarterly*, vol. XXVI (1911), pp. 486-491.

(3) a sum, which normally should not be less than 65 per cent of the total postal savings deposits, to be kept on deposit "in solvent banks, whether organized under national or state laws, being subject to national or state supervision and examination. . . ." ⁵⁷ It was declared to be the intent of the act that this residual 65 per cent should remain on deposit in the banks in each state and territory willing to receive them, ⁵⁸ and should be a working balance and a fund which might "be withdrawn for investment in bonds or other securities of the United States, but only by direction of the President, and only when, in his judgment, the general welfare and the interests of the United States so require." This latter provision authorizing the borrowing of the balance by the government was motivated largely by the desire to strengthen the constitutional position of the act.

Postal savings funds deposited in banks were to bear interest at a rate of not less than $2\frac{1}{4}$ per cent, and the Board of Trustees was to require depository banks to give adequate security for such deposits, in the form of "public bonds or other securities, supported by the taxing power."

Investment in bonds. Aside from the purchase of a few postal savings $2\frac{1}{2}$ per cent bonds (\$1,558,500 in all down to June 30, 1916) from their holders in order to maintain their parity, the trustees of the postal savings system have made no purchases of bonds whatever. The banks, despite their early opposition to the system, showed great eagerness in most localities to secure postal savings deposits, and from the beginning practically all of the funds were deposited in banks. ⁵⁹

⁵⁷ The word "bank" was declared by the law (sec. 9) to "include savings banks and trust companies doing a banking business."

⁵⁸ The funds received at the postal savings depository offices in each locality were to be deposited "in banks located therein (substantially in proportion to the capital and surplus of each such bank) willing to receive such deposits under the terms of this act and the regulations made by authority thereof. . . . If no such bank exist in any city, town, village, or locality, or if none where such deposits are made will receive such deposits on the terms prescribed, then such funds shall be deposited under the terms of this act in the bank most convenient to such locality. If no such bank in any State or Territory is willing to receive such deposits on the terms prescribed, then the same shall be deposited with the treasurer of the Board of Trustees, and shall be counted in making up the reserve of five per centum." Section 9 of Postal Savings Act.

⁵⁹ The 5 per cent reserve held in the United States Treasury at Washington is adjusted only once a year, and, inasmuch as there has been an increase of

Deposit of postal savings funds in banks. The percentage of the total postal savings deposits which had been redeposited and was held in banks at the end of each half-year period since the inauguration of the system is as follows:⁶⁰

Date	Per cent
June 30, 1911.....	84.4
Dec. 31, 1911.....	91.1
June 30, 1912.....	91.8
Dec. 31, 1912.....	93.9
June 30, 1913.....	93.2
Dec. 31, 1913.....	94.3
June 30, 1914.....	94.2
Dec. 31, 1914.....	94.5
June 30, 1915.....	91.5
Dec. 31, 1915.....	92.8
June 30, 1916.....	93.8

The postal savings amendment of May 18, 1916, therefore, merely recognized the *status quo* when it repealed the provision of the act of 1910 authorizing the investment of 30 per cent of the deposits in United States securities. It reenacted the provision authorizing the Board of Trustees to invest all or any part of the postal savings funds, except the 5 per cent reserve fund, in bonds or other securities of the United States, "when, in the judgment of the President the general welfare and interests of the United States so require." Aside from this, the only provisions in the present law for the investment of postal savings funds in United States securities are: (1) That the Trustees may so invest any funds which in any state or territory "shall exceed the amount which the qualified banks therein are willing to receive under the terms of this Act, and [when] such excess amount is not required to make up the reserve fund of 5 per centum." This is a contingency which has not yet been met and is not likely to occur. (2) That the Board of Trustees may in its discretion purchase from the holders $2\frac{1}{2}$ per cent postal savings bonds. As

deposits during each year, the percentage of reserve as adjusted declines throughout the year. With deposits growing as rapidly as those of the postal savings system, such a long interval between the dates of the adjustments of the reserve, results in the maintenance of a reserve which averages far below 5 per cent. Probably a 5 per cent requirement is unnecessarily high under the circumstances. If so, it should be reduced by law. To make the percentage of the reserve vary inversely throughout the year, as at present, with the amount of postal savings deposits, seems to be a questionable policy. Cf. *Ann. Rep. 3d Assist. Postmaster Gen.*, 1913, p. 37.

⁶⁰ The balances on deposit in banks used in these computations are those shown by the banks' books. At all times there is a small amount of postal savings funds in the hands of postmasters.

previously noted, up to June 30, 1916, the trustees had purchased about a million and a half dollars worth of these bonds. If the market rate of interest goes up materially in the near future, and the prospects are that it will, the trustees are likely to be called upon to purchase them in substantial quantities.

Distribution of postal savings funds among banks. Soon after the act of 1910 was passed the Post Office Department received applications from all kinds of banks scattered throughout the country for the privilege of becoming depositories of postal savings funds. On December 31, 1910, the Board of Trustees issued their first series of "regulations for the guidance of banks qualifying as depositories of postal savings funds." The regulations provided that "any solvent bank, whether organized under national or state laws, . . . subject to national or state supervision and examination" might lawfully qualify as a depository. According to Director Weed, this authorization was limited to incorporated banks or "banks that are clothed with the essential attributes of corporations by virtue of legislative action."⁶¹ Private banks were all excluded, except a certain class in Indiana which met the requirements as to "organization, supervision and examination." Branch banks were excluded which did not have apportioned to them by the parent bank a specified amount of capital. In a number of states, state banks which could have qualified under federal law were prevented from doing so by state law, but this was later remedied in most jurisdictions.⁶²

In order to qualify as depositories, banks were required to submit a satisfactory report of condition and to offer proper collateral for the deposits—a subject to be considered later. Funds were to be apportioned among the qualified banks only on the first day of each quarter. A later regulation (section 10 of regulations of 1913) provided that the apportionment of deposits to newly qualified banks would only "apply to funds deposited after the date as of which the bank qualified"—a regulation that was necessary to avoid the confusion which would result from a com-

⁶¹ *Com. & Fin. Chron.*, A. B. A. Conv. Suppl., 1912, p. 192.

⁶² State banks were originally disqualified in Arkansas, California, Kentucky, Massachusetts, Michigan, Mississippi, South Dakota, Tennessee, and Wisconsin. By 1916, however, state institutions in all of these states except Arkansas and Mississippi had qualified as postal savings depositories. Cf. Theodore L. Weed, "The Postal Savings Banks and the United States," in *Com. & Fin. Chron.*, A. B. A. Conv. Suppl., Sept. 21, 1912, p. 192; and *Ann. Rep. 3d Assist. Postmaster Gen.*, 1916, p. 33.

plete reapportionment of deposits each time a new bank in the community qualified as a depository.

The number of banks of each class which were qualified as depositories for postal savings funds at the end of each fiscal year since 1912 is as follows:⁶³

TABLE 5.—NUMBER OF BANKS QUALIFIED AS DEPOSITORIES, 1913-1916, BY CLASSES.

Year	National banks	State banks	Savings banks	Trust companies	Organized private banks	Total
1913	3,786	2,405	377	609	49	7,226
1914	3,627	2,099	347	617	25	6,715
1915	3,628	1,499	291	568	21	6,007
1916	3,547	1,257	262	547	21	5,634

The tendency of the total number of depository banks to decline is due to a number of causes among which may be mentioned: (1) the plethora of moneyed capital during the past two years, which has made deposits of postal savings funds unattractive to many banks, requiring as they do the pledge of collateral and the payment of $2\frac{1}{2}$ per cent interest; (2) the discontinuance of postal savings banks in many communities;⁶⁴ and (3) the legislation discriminating against banks which are not members of the federal reserve system as depositories. This last item calls for further discussion.

The Federal Reserve Act, as originally enacted, contained a clause (section 15) to the effect that no government funds nor postal savings funds should be deposited in the continental United States in any bank not belonging to the federal reserve system. This provision was construed by the Attorney General to permit the continuance in non-member banks of postal savings balances already on deposit, but to prevent the making of any further deposits in such banks.⁶⁵ The discontinuance of making deposits in

⁶³ Figures have been compiled from the annual reports of the Third Assistant Postmaster General.

⁶⁴ *Supra*, p. 49.

⁶⁵ Concerning this subject the Third Assistant Postmaster General said in his annual report for 1915 (p. 12): "No deposits have been made in non-member banks since November 16, 1914, the day the [federal reserve] system went into operation. The Attorney General of the United States has held that the inhibition on depositing postal savings funds in non-member banks applies only to funds available for deposit on and after the date when the system went into operation, consequently withdrawals from non-member banks have not been made except to meet the demands of the service."

non-member banks gave rise to much inconvenience and to an increase in the expenses of administration—evils which non-member banks were not slow to bring prominently before representatives in Congress. Carter B. Keene, Director of Postal Savings, said the restriction of deposits to member banks

resulted in the elimination of hundreds of state banks. In many instances it was necessary to send funds long distances to places where eligible banks were located. This worked embarrassment in the expeditious and safe administration of the service, and at the same time defeated the dominant thought that controlled the finances of the organic Postal Savings Act, that the deposits brought out of hiding should be released for commercial purposes in the identical localities where they originated.”⁶⁶

A number of bills were introduced in Congress providing for the reauthorization of state banks as depositories, and finally a bill (H. R. 7967, 63 Cong., 2 Sess.), whose history has previously been narrated in connection with the discussion of the raising of the limits on deposits,⁶⁷ was passed by both houses of Congress, authorizing deposits of postal savings funds “in solvent banks, whether organized under national or state laws, and whether member banks or not of a reserve bank, . . . being subject to national or state supervision and examination. . . .” On September 11, 1914, President Wilson vetoed this bill, and communicated his reasons therefor in a veto message to Congress.⁶⁸ In this message he said:

When the Federal Reserve Act was passed it was thought wise to make the inducements to State banks to enter the Federal reserve system as many and as strong as possible. It was, therefore, provided in that act that government funds should be deposited only in banks which were members of the federal reserve system. The principle of such a provision is sound and indisputable. The moneys under the control of the government ought to be placed only in those banks which are most directly under the supervision and regulation of the Congress itself. It was recognized, also, that the scattering of government deposits in small amounts among too large a number of banks would in time of stress be of decided disadvantage to the federal reserve system, which seeks as much as possible to mobilize the financial resources of the country under one control. The bill which I now return repeals that provision so far as it might apply to funds accumulated in the hands of the government under the postal savings system. It is in this provision of the bill that I find myself unable to concur.

It is my clear conviction, very respectfully urged and submitted,

⁶⁶ *Com. & Fin. Chron.* A. B. A. Conv. Suppl., Oct. 14, 1916, p. 192.

⁶⁷ *Supra*, p. 66.

⁶⁸ House Doc. No. 1162, 63 Cong., 2 Sess.

that as a matter of principle as well as of policy we should strengthen and safeguard the new banking system very jealously with a view to the ultimate unification of the entire banking system of the country under the supervision of the Federal Reserve Board. It would, in my judgment, be a grave mistake to take away any of the benefits or advantages held out by the present law to member banks to enter the system, and to take them away just as the system is about to be put into operation and the promises of the act of last December made good to the banks that have entered.

A year and a half later, *i.e.*, May 18, 1916, the Postal Savings Amendment act was passed, which contained a compromise between the positions on this subject taken in the bill previously vetoed and in the veto message. This amendment, which is the present law, provides (section 2) that:

if one or more member banks of the Federal reserve system . . . exists in the city, town, village, or locality where the postal savings deposits are made, such deposits shall be placed in such qualified member banks substantially in proportion to the capital and surplus of each such bank, but if such member banks fail to qualify to receive such deposits, then any other bank located therein may . . . qualify and receive the same.⁶⁹

In this connection it is interesting to note that the proportion of the depositories which were national banks was not very much greater on June 30, 1916, than on June 30, 1914, before the Federal Reserve Act went into effect, the respective percentages being 63 and 54.

The first two years' experience with depository banks taught some lessons which in the reorganization of 1913 led to certain administrative changes. The most important of these were the abolishment of the cumbersome system of "emergency credits" and the creation of a more efficient method of handling "out-of-town accounts."

Abolition of postmasters' "emergency credits." Each postmaster now as always is instructed to apportion his deposits of postal savings receipts among all the banks in his city or town, which are qualified as postal savings depositories, substantially in proportion to their respective capitals and surpluses.⁷⁰ All of

⁶⁹ The law as thus amended has been interpreted by the Counsel of the Federal Reserve Board. See *Federal Reserve Bulletin*, July 1, 1916, pp. 331-332.

⁷⁰ This system which is apparently essential to the meeting of two of the postulates of American postal savings—"keeping money at home" and satisfying "competing" banks—often becomes exceedingly cumbersome. Why this is

the postal savings funds so deposited are to be entered to the credit of the Board of Trustees of the postal savings system. Prior to July 1, 1913, however, there was one exception to this latter rule, and that was described as follows in the official regulations:

[This rule applies except for] an amount which will be specified by the Board as an emergency credit for use by each postmaster in meeting withdrawals by depositors when he has insufficient funds on hand for such purpose. The amount thus fixed will be deposited by the postmaster to his official credit in one of the depository banks especially designated for the purpose, to be subject to his official check as postmaster for the purpose mentioned only, and will be maintained by the postmaster at the amount specified by the Board of Trustees; by means of deposits from his daily postal savings receipts . . . The amount of emergency credit may be added to the regular quota assigned to a depository bank, . . . and shall be subject to interest payment . . .⁷¹

That the creation of such an emergency credit account in the name of each postmaster, at whose office there was a postal savings bank, was making a system already complex doubly so is evident. It gave rise to about 13,000 extra accounts and involved "endless correspondence, bookkeeping, and interest computing details."⁷²

The "emergency credit" and all the individual postal savings accounts with banks in the names of postmasters, were done away with by the new regulations put in force July 1, 1913. In place thereof the expedient was adopted of designating in each place one bank upon which the postmaster was authorized to draw his checks against the postal savings deposit (in the name of the Board of Trustees) each month, to an amount specified, as a provision for emergency needs.⁷³

true will be evident when one bears in mind that in most cities and towns the postal savings deposits each day are small, while in a large proportion of places there are several banks among which the postal savings funds must be apportioned. As early as 1912, for example, there were 40 qualified depositories in Chicago, 30 in Philadelphia, 19 in New York, and between 10 and 12 in a number of other cities. *Com. & Fin. Chron.*, A. B. A. Conv. Suppl., Sept. 21, 1921, p. 191.

⁷¹ *Regulations for the Guidance of Banks Qualifying as Depositories of Postal Savings Funds*, etc., issued by authority of the Board of Trustees, 1911, p. 6.

⁷² Carter B. Keene, "The Postal Savings System," *Com. & Fin. Chron.*, A. B. A. Conv. Suppl., Oct. 18, 1913, p. 196.

⁷³ *Instructions to Postmasters at Postal Savings Depository Offices*, 1913, p. 12.

Out-of-town depositories. Another cumbersome feature of the original plan which was greatly improved in the reorganization of 1913 related to the deposit of funds in banks outside of the local community, when there was no qualified depository bank in the place where the postal savings bank was situated. Originally postmasters in such places had been required to send their postal savings funds by registered mail to the nearest town having a qualified bank or banks, and to apportion their deposits among such banks (when there was more than one) substantially according to their respective capitals and surpluses. Under the new arrangement, the postmaster at the place having no qualified banks remits his postal savings funds by registered mail to the postmaster at the neighboring place having qualified banks, and the latter postmaster deposits these funds along with his own postal savings funds, in the proper proportion in the various qualified banks. Postmasters at non-banking offices now secure funds for meeting withdrawals of deposits by means of drafts on the postmasters to whom their remittances have been made.

Collateral security. The organic postal savings act of 1910 provided that the Board of Trustees should take from depository banks "such security in public bonds or other securities, supported by the taxing power, as the Board may prescribe, approve, and deem sufficient and necessary to insure the safety and prompt payment of such deposits on demand."⁷⁴ Securities acceptable under this provision have been interpreted to be limited to the "general obligations" of the political division issuing them and payable "without restriction or limitation to a special fund from the proceeds of taxes levied upon all taxable real and personal property within the territorial limits of such political division."⁷⁵ Shortly after the outbreak of the European war the Post Office Department was "virtually swamped" with requests to accept as collateral for postal savings deposits various kinds of temporary securities. In reply to these requests the Board of Trustees, November 19, 1914, adopted the following regulations:

⁷⁴ In the amendment of May 18, 1916, this provision was reenacted; but after the words "other securities" were inserted the words "authorized by Act of Congress or." This addition apparently had reference to the agitation for authorizing postal savings funds to be invested in the securities of federal land banks, the bill for the establishment of which was then before Congress.

⁷⁵ *Rulings of Board of Trustees*, Nov. 18, 1913, as modified by rulings of Nov. 19, 1914.

Obligations of the general class embracing what are commonly known as "revenue bonds," "temporary bonds," "temporary notes," "certificates of indebtedness," "warrants," and the like obligations, whether issued in anticipation of the collection of taxes, assessments, or other revenues, or of the sale of bonds or other obligations, or for similar purposes, will not be accepted as security for postal savings deposits: *Provided*, That in applying this regulation, consideration will be given to the legal status of the obligations submitted rather than the nomenclature employed in designing such obligations.⁷⁶

Since the reorganization of 1913, the Solicitor for the Post Office Department (designated as the Assistant Attorney General for the Post Office Department prior to November 9, 1914) has passed upon the legal acceptability of all bonds submitted as security for postal savings deposits.⁷⁷

The Board of Trustees in its first *Regulations for the Guidance of Banks*, issued December 31, 1910, made the following ruling⁷⁸ in regard to the securities acceptable for postal savings deposits:

The following described securities at rates respectively designated, will be accepted, [and no other] . . .

(a) Interest-bearing bonds of the United States, bonds issued by the Government of the Philippine Islands, and bonds of the District of Columbia and the Government of Porto Rico will be received at their par value.

(b) Bonds of any State of the United States and bonds of the Territory of Hawaii will be received at 90 per cent of their market value, such market value not to be considered as exceeding par.

(c) Bonds of any city, town, county, or other legally constituted municipality or district in the United States which has been in existence for a period of ten years, and which, for a period of ten years previous, has not defaulted in the payment of any part of either principal or interest of any funded debt authorized to be contracted by it, and whose net funded indebtedness does not exceed 10 per cent of the valuation of its taxable property, to be ascertained by the last preceding valuation for assessment of taxes, will be received at 75 per cent of their market value, such market value not to be considered as exceeding par.

⁷⁶ Pamphlet published by Post Office Department entitled, *Determining the Legal Acceptability of Bonds Offered as Security for Postal Savings Deposits*, 1915. See also *Report of the Solicitor for the Post Office Department to the Postmaster General for the Year Ended June 30, 1914*, pp. 8-12.

⁷⁷ An account of his work in this connection and summaries of his decisions will be found in his annual reports.

⁷⁸ *Regulations for the Guidance of Banks Qualifying as Depositories of Postal Savings Funds*, etc., issued by authority of the Board of Trustees, 1911, pp. 4-5.

No deposit of bonds for less than one thousand dollars will be accepted, nor will fractions of a thousand be received.⁷⁹

In 1913, bonds in the group marked (b) were made acceptable up to their market value provided it was not above par value; and bonds in group (c), for cities having a census population of over 30,000, were made acceptable up to 90 per cent of their market value instead of only to 75 per cent as formerly. If the market value is above par they are acceptable only up to par. A fourth class of securities was designated at this time which are acceptable up to 75 per cent of their market value (unless the market value is above par value). This last class consists of securities meeting the conditions mentioned for class (c), except for the fact that they refer to places having a census population of not exceeding 30,000.

As collateral for postal savings deposits, municipal bonds have been by far the most popular type of security offered by banks; and the demand for high grade municipal bonds for postal savings collateral has been a substantial influence in the market for a number of issues. It is an interesting fact that not a dollar has yet been lost by the postal savings system through inadequacy of security given by depository banks.

Rate of interest paid by depository banks. Section 9 of the organic postal savings act says that the rate of interest paid by depository banks shall be "not less than $2\frac{1}{4}$ per centum per annum, which rate shall be uniform throughout the United States and Territories thereof." Although there was considerable sentiment for a higher rate, the Board of Trustees, at its meeting of December 31, 1910, fixed the rate at $2\frac{1}{2}$ per cent per annum payable January 1 and July 1 each year "upon the average monthly balances." The term average monthly balances was at first interpreted to mean the average of the balances held on the last of each month. Inasmuch as the balances were normally growing throughout the month, the amount on the last day was unduly high, and this method of computing led justly to complaints on the part of depository banks. The basis was accord-

⁷⁹ This minimum of \$1,000 worked a hardship on banks in small places having fourth class post offices; and, for banks in such places, the minimum was later reduced to \$500. Since July 1, 1913, the minimum initial deposit of bonds required from banks has been \$5,000 in a place with a first class post office, \$1,000 in a place with a second or third class post office, and \$500 in a place with a fourth class post office. *Regulations for the Guidance of Qualified Banks and Others, Effective July 1, 1913*, p. 4.

ingly changed to the average daily balance which has been generally satisfactory.

Profits realized by banks on postal savings accounts. Concerning the extent to which postal savings accounts have been profitable to depository banks it is unsafe to generalize. The profit varies with the prices of bonds acceptable as security; and the last few years have been years of unstable bond prices, and years of great uncertainty as to bond values in the future. It varies with the extent to which the deposits received will cover the collateral deposited; and it varies with the actual amount of deposits obtainable—in many cases the accounts are too small to be worth the trouble.⁸⁰ Many banks have not found it to their advantage to qualify as depositories, while others have realized good profits on such deposits,⁸¹ and in many communities the competition for them is keen. The advantage of advertising oneself as a depository of United States postal savings funds is valued highly by many banks.

Postal savings bonds. A discussion of the postal savings system would be incomplete without a reference to the postal savings 21½ per cent bonds authorized by the act of 1910.⁸² The primary object of these bonds, which are issued in denominations as low as \$20, is to provide a safe and convenient form of government security for the thrifty poor, and particularly for those whose deposits in the postal savings banks have reached the legal maximum. These bonds have been issued on the first day of each January and July since the postal savings system was put into operation, and the total issue up to the close of the fiscal year 1916 was \$9,151,800. Of this sum, approximately 86 per cent was, on request, issued in the registered form; which indicates, in the judgment of the Third Assistant Postmaster General, "that they were purchased for permanent investment."⁸³

⁸⁰ The writer has on his desk a circular issued by a prominent bond house, in which are computed the rates of interest that would be realizable on the net investment in the case of \$100,000 par value of six different high grade bonds, against which it is assumed the maximum postal savings deposits allowed by the Department's regulations would be received. The rates per annum on the net investments vary from 4.8 per cent to 19.36 per cent.

⁸¹ The banks often complain of the large "amount of red tape" that such deposits entail.

⁸² The bonds are redeemable at the pleasure of the United States after one year from date of issue, and are payable twenty years from date of issue.

⁸³ Annual Report, 1916, p. 11.

On November 8, 1911, it was reported in the newspapers that some of these bonds had been sold at 92½. The report, which was apparently false,⁸⁴ caused some anxiety, and the Board of Trustees, who were authorized by the Postal Savings act (section 10) to invest postal savings funds in these bonds, promptly passed a resolution to purchase them at par upon the application of any holder, and to make immediate payment therefor in cash. Up to June 30, 1916, the board had purchased \$1,558,500 worth of these bonds.

Conclusion

The postal savings system, despite the handicaps of a defective structure, has made substantial progress during the first six years of its history, and has rendered the country a real service.

When the Postal Savings act was passed the only plan that had the slightest chance of getting through Congress was a highly decentralized one which would use existing banks as depositories, and try to keep the money deposited in postal savings banks "at home." This philosophy of keeping money at home merely meant that the profits that were to be realized on the investment of postal savings funds should be given to local banks. Money is too fluid a form of capital to be "kept at home" if it is in greater demand in some other place. In 1910 it was less fluid in the United States than in most advanced countries. That was the time of a vigorous agitation for the reform of our currency and banking system whose chief defects were generally recognized to be immobility and inelasticity of currency and credit. The meaning of this was, in part, that reserves and bank credit were being kept too much at home when the public interest demanded a cheap and expeditious machinery for their prompt movement from places of redundancy to places of scarcity. But even under our defective banking system in 1910, money and bank credit were the most fluid forms of capital in the country, and were continually "leaving home." They are much more fluid in 1917 than they were in 1910, thanks to our federal reserve system, and our developing American discount market. The great bulk of the postal savings deposits are in large cities. For example, on June 30, 1916, New York City

⁸⁴ The *New York Times* of November 18, 1911, quoted Postmaster General Hitchcock as saying that "the only basis for the rumor of an actual sale at that price [i. e., 92½] was an offer . . . by a New York broker to purchase \$200 of the bonds below par, which was not accepted by the holder."

(including Brooklyn and Long Island City) had 24 per cent of the total postal savings deposits of the country. Does any one think that it is possible "to keep money at home" in our large cities by merely depositing it in commercial banks, or that it would be socially desirable to do so, if it were possible?

This brings me to the last point. Six years of postal savings history in the United States has shown that postal savings funds come largely from hoards and from accumulations that would otherwise be sent abroad by our foreign born. As previously noted, 86 per cent of the postal savings bonds purchased are in the registered form and presumably for permanent investment. All this seems to indicate that postal savings funds are more nearly capital funds than current business funds. Yet our depository system puts the great bulk of them into commercial banks. Should the system not be changed so as to divert a larger part of these savings into savings banks where they will be feeders for society's more permanent capital equipment?

At the present time this question is particularly opportune, for the evidence is strong that the next few years will witness a substantial increase in interest rates. This increase will bear heavily upon our mutual savings banks whose assets in the form of long-time bonds and mortgages are likely to decline in value at just the time that the higher interest rates payable on securities will be attracting funds away from savings banks into fields that appear to be more remunerative, *e. g.*, small denomination bonds. A more liberal use of savings banks as depositories for postal savings funds would assist these worthy institutions to tide over a troublesome period of readjustment. The type of depositor who uses the postal savings system is not the one who will be induced to withdraw deposits in order to invest the funds in securities yielding a higher rate of interest. To accomplish much in the direction suggested would require an amendment to the Postal Savings act. The fact that savings banks, with few exceptions, are not members of the federal reserve system is not a strong argument against this proposal, because there is no sound public policy in encouraging them to join as active members.⁸⁵ The federal reserve system

⁸⁵ A bill prepared by the Federal Reserve Board and now in Congress authorizes mutual savings banks not having a capital stock to become *associate* members of the federal reserve system, under certain prescribed conditions. It is a very desirable amendment. (*Federal Reserve Bulletin*, Feb. 1, 1917, p. 101.)

is primarily a system for commercial banks. Could not our best grade savings banks wisely be put on an equal footing, at least, with commercial banks which are members of the federal reserve system, with regard to qualifying as depositories for postal savings funds?

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THE HISTORY OF THE TRADE DOLLAR

The issuance of the trade dollar by the United States in 1873 (and for several years thereafter) was in the nature of a commercial experiment. Similar experiments had been made in other countries, but the creation of the trade dollar was brought about by a different set of conditions and purposed a different end.

Despite its name, the trade dollar was not a coin in the accepted sense of the word. It was no more a coin than is the medal awarded an inventor, an athlete, or the producer of a patent food. It was no more a coin than a silver paper-cutter is a table knife. This fact, so profoundly misunderstood in the seventies by the public, by members of Congress, and by officials of the Treasury Department, makes the trade dollar and its history curiously interesting. Some account, therefore, of its introduction, its proposed functions, and its final abrogation and withdrawal may not be amiss.

In the autumn of 1872, the late Louis A. Garnett of San Francisco, the present writer's father—then manager of the San Francisco Assaying and Refining Works—laid before Dr. H. R. Linderman, Superintendent of the Philadelphia Mint, and subsequently the first Director of the Mint, under the act of 1873 establishing the Mint Bureau at Washington, the suggestion for the trade dollar.¹ Mr. Garnett gave to Dr. Linderman a memorandum of all the essential facts and technical details as to weight and fineness, which he thought would justify the experiment and insure its success.

The conditions that led to the suggestion were these. Mexico was and had been sending to San Francisco silver dollars in large but varying quantities. These were sold for gold at about 7½ per cent above the technical parity of the London quotations for bar silver, and were exported by our merchants and bankers to China, either as a direct remittance for account of the shipper or as a cover for bills of exchange drawn for Eastern or European account. For example, when the London quotation on fine silver

¹ In addition to promulgating the trade dollar, Mr. Garnett suggested the provisions in the coinage laws for the creation of the Mint Bureau, the repeal of the gold coinage charge, and the law regulating the valuation of foreign coins upon the intrinsic value. He was the author of *The Paris Monetary Conference of 1881 and Bimetallism; Facts and Fallacies Concerning the Doctrine of Protection*, and numerous other monographs on economic subjects and was a member of the Monetary Commission created by the Indianapolis Monetary Conference of 1897.

was $28\frac{3}{4}$ d. or 63.02 cents per ounce, at which a Mexican dollar of $377\frac{1}{4}$ grains of fine silver would be worth 49.53 cents, Mexican dollars were actually quoted in the San Francisco market at from 53 to $53\frac{1}{2}$ cents or more than three cents in excess of the London price for fine silver and equivalent to a premium of $7\frac{1}{2}$ per cent on the valuation of 49.53 cents, the bullion value of the silver contained in the Mexican dollar. It will be seen that, at this rate, the merchants and bankers of San Francisco were paying a large sum for the privilege of doing business in China with Mexican dollars, thereby making a market for Mexican silver while our own product of that metal was declined and excluded. The Mexican dollar was accepted by the conservative Chinese, and had practically become the money of account of China and Japan in their commerce with foreign nations, to the disadvantage of all other silver coins. It was thought highly important therefore that the trade in silver should be diverted if possible from Mexico to our own sources of supply.

These were the conditions, then, that suggested the promulgation of the trade dollar. In November, 1872, Dr. Linderman, in a report to the Secretary of the Treasury, stated all the facts and employed all the arguments to be found in support of the proposed experiment, in which he adhered strictly to the technical features embodied in the original memorandum submitted to him by Mr. Garnett. This part of the report is as follows:

It is not proposed to make the new coin or disk a legal tender in payment of debts, but simply a stamped ingot with the weight and fineness indicated. Its manufacture can, therefore, in no wise give rise to any complication with our monetary system, and neither in theory or principle differ in any respect from the manufacture of refined bars was authorized by law, except in being uniform in weight and fineness. The proposed coin or disk should weigh 430 grains and contain 378 grains of pure silver, the difference of 42 grains representing the alloy of copper, and the weight and fineness be stamped on the reverse of the coin. . . . In the event of the issue of the proposed coin it will be well to give it a title, as for instance Silver Union, differing from the coins representing our subsidiary and dollar of account.

It will be observed that the suggestion was made to call the new coin the "silver union" and not the "trade dollar." When this proposal was made the supply of Mexican dollars was irregular, unsatisfactory, and frequently embarrassing to commercial transactions, and the high premium they commanded was a severe tax upon our commerce. It was hoped that the new coin, by virtue of

its greater intrinsic value, its superior execution, and its absolute uniformity in both weight and fineness, would commend itself to general use in China and Japan. It was expected to relieve our commerce of a serious tax and to furnish an important outlet for our constantly increasing production of silver; and it might also be expected to lead to our arbitration of no inconsiderable portion of the European exchange with those countries.

The records of the engraving department of the Philadelphia Mint show that a number of tentative designs were made, probably by order of Dr. Linderman, prior to the date of his report recommending the adoption of the coin.

In proposing this new arbiter of exchange, its author took into account the established partiality of the Chinese for the Mexican dollar and their natural repugnance to all innovations. They had rejected some standard dollars, made in our mint in 1859-1860 for an experimental shipment, and had only recently discredited the new Mexican dollar because, though its intrinsic value had in no wise been affected, the devices had been somewhat changed. Mr. Garnett was therefore not without misgivings, but knowing that the proposed coin would be intrinsically about two mills more valuable than the Mexican dollar, more uniform in weight and fineness, and of superior artistic workmanship, his chief reliance was upon the acquisitive instincts of the Chinese and their aptitude for figuring out practical results in the way of trade. As the result proved, he was not mistaken in his calculations.

Though the coinage act, providing for the trade dollar, became a law on February 12, 1873, it was not until July of that year that the coinage of trade dollars was begun. Naturally the demand at first was moderate until it could be ascertained by our merchants and bankers how the new coin would be received in China. Official tests and assays were made by the Chinese government from the first shipment. The results were in the highest degree satisfactory, and were followed by a proclamation declaring the coin a legal tender. In 1877, four years after the introduction of the new coin, our consul at Hong-Kong furnished the Secretary of the Treasury with a report upon the trade dollar, in which he quotes the opinions of the two leading foreign banks in China—the Oriental Bank and the Hong-Kong and Shanghai Banking Corporation—to the following effect:

The United States trade dollar has been well received in China and is eagerly welcomed in these parts of the country when the true value of the coin is known. It is a legal tender at the ports of Foochow and

Canton in China, and also at Saigon and Singapore. Although not legally current in this colony, it is anxiously sought after by the Chinese, and in the bazaars it is seldom to be purchased. In proof of the estimation in which the trade dollar is held in the south of China, we need only state that the bulk of the direct exchange business between San Francisco and Hong-Kong (which is very considerable) is done in this coin, the natives preferring it to the Mexican dollar. Late advices from San Francisco report that so great is the demand for trade dollars for shipment to China, that the California Mint is unequal to the task of turning out the coin fast enough to satisfy requirements. This is, in our estimation, evidence powerful enough to convince the most sceptical as to whether the United States trade dollar has been a success or not. It is the best dollar we have ever seen here, and as there can be no doubt as to the standard of purity being maintained, it will become more popular day by day, and, we doubt not, ultimately find its way into North China where the people are more prejudiced against innovations.

No indorsement could be higher than this. Both of these banks were English corporations and as the English colony of Hong-Kong had but recently attempted to introduce a "metrical" dollar of its own, which had signally failed, it might be naturally expected that the success of the trade dollar was not particularly flattering to English pride, and that the declination to make our dollar a legal tender may have been, to some extent, influenced by chagrin. But according to the authorities here quoted, the natives preferred it to the Mexican dollar, and it circulated notwithstanding the want of official recognition.

Beginning in July, 1873, the coinage of the trade dollar steadily increased until 1878 when it incurred the enmity of the "friends of silver" who had just then restored the old standard dollar with which, it was alleged, this coin conflicted. The coinage of trade dollars for the fiscal years up to that date had been as follows:

1874	\$3,538,900
1875	5,697,500
1876	6,132,050
1877	9,162,900
1878	11,378,010

Total \$35,959,360

From 1879 to 1884 the Philadelphia Mint continued to coin these dollars in small quantities, aggregating \$6,564, making the total coinage \$35,965,924.

We come now to the causes leading to the abrogation of the trade dollar. In the original suggestion it was considered im-

portant that the proposed disk *should not be made a part of or be in any way confounded with our monetary system*. It was, as has been stated, in no sense to be regarded as a coin or as having *any monetary function for local or domestic purposes*. It was intended to be simply an *adjusted* disk of silver, of uniform weight and fineness, and as a precaution against possible confusion regarding the limited functions of the new disks, it was definitely proposed that they should be stamped with some legend by which they would be known and distinguished from our legal tender coins, such, for example, as "silver union" or "silver arbiter." These discoid ingots of adjusted weight and fineness were to stand on precisely the same footing as the manufactured standard or fine silver bars, the depositor furnishing the silver and paying to the government the full cost of manufacture. Had this fundamental idea been adhered to, all the trouble that ensued would have been avoided.

During the last months of the period of two and a half years that the coinage act of 1873 had been pending in Congress, Mr. John J. Knox, then Deputy Comptroller of the Currency, undertook, at the direction of the Secretary of the Treasury, to formulate an amendment to the pending bill, authorizing the manufacture of the proposed disk. An attempt, however, had been made by some one in the department to alter the specifications and make it a "metrical" coin, in the face of the ill-fated English experiment in Hong-Kong, to which allusion has already been made. It was only by an extended telegraphic correspondence that Mr. Garnett was able to avert this action, which would have been fatal to the success of the proposed coin.

It is necessary to state here that the old silver dollar had been eliminated from the bill before it was presented to Congress, and that it was not at any time restored in any of the numerous reprints of the bill. The reasons for omitting it were given in full in the printed appendix of the original bill as submitted to Congress, as well as in the pamphlet of correspondence with mint and other experts shortly afterward published at the request of the House. The numerous allegations, therefore, which have been made against Senator Sherman, as chairman of the Finance Committee of the Senate, until they have become historical, charging him with the demonetization of silver, are without foundation in truth. What bearing these facts had upon the trade dollar will be hereinafter shown.

While this bill, which afterward became the coinage act of 1873, was still pending, a provision was introduced by Mr. Hooper for the coinage of a silver dollar. This was to have been a subsidiary dollar of 384 grains, and, like the fractional silver coins, was to be a legal tender for only \$5. This proposed dollar was finally stricken out as impracticable by the Finance Committee of the Senate, and the "trade dollar," as it was unfortunately decided to call the new coin, was put in its place.

Now, the last clause in the section (before this substitution was made) provided that the dollar piece, together with the fractional coins indicated, *should be a legal tender for the sum of \$5*. Thus, by the failure, due to a palpable oversight, to alter this clause so as to exempt the trade dollar from its operation, that coin was made a legal tender for \$5, which, as shown by Dr. Linderman's report, quoted above, was never intended by its author.

The circumstance attracted no particular attention at the time, nor when first discovered was it supposed to possess any significance. Even after the trade dollar began to be circulated to a limited extent among the more ignorant classes, the evil was thought to have been remedied when, by the act of July 22, 1876, the legal tender functions of the coin were repealed. But in the mean time the price of silver had broken badly, and the metal had entered upon the downward course from which it has never since recovered. In 1878, Congress restored the old "standard dollar" to its former place in our currency, and its friends, who, by some unaccountable mistake, had connected its demonetization with the substitution of the trade dollar for Mr. Hooper's subsidiary dollar (which, as we have seen, had been quashed in committee) joined in the raid of speculators who had begun collecting and buying up at a discount the trade dollars that had crept into circulation, declaring that the government was bound to redeem them since they had been made a legal tender.

In March, 1887, nearly eleven years after the legal tender functions of the coin had been repealed, and when silver had declined below 98 cents per fine ounce, or 25 per cent discount, Congress passed a bill compelling the government to redeem trade dollars at par in standard dollars, and at the same time repealed the authority for their further coinage.

The government redeemed under this act \$7,689,936. This sum was equivalent to 6,018,921 ounces of fine silver, which, at the average value for the year 1887 (\$0.97,832) was worth

\$5,887,889. In redeeming them, therefore, at par in standard dollars, the government simply gave a bonus of \$1,800,000 to the holders, as the same amount of silver could have been purchased for that much less than the sum disbursed, and converted into standard dollars. It is incredible that these dollars could have been taken by the holders through ignorance in payment of debts; they were, on the contrary, bought up at a discount before the passage of the redemption act, and in anticipation of such a measure. This is substantiated by the fact that up to July, 1876, when the legal tender functions of these coins was repealed, the total coinage had only reached \$15,418,450, of which \$12,580,000 had been exported, leaving only \$2,838,500 in this country, and *no trade dollars came back until 1879, three years later.*

In 1878, when the trade dollar was in use, the ratio of domestic and foreign specie exported was 82 per cent of the former against 18 per cent of the latter, represented by \$13,727,982 and \$3,011,650 respectively. After the suspension of the coinage of the trade dollar, the ratio was inverted and we subsequently exported many millions of dollars in foreign silver coin which might as well have been the American product instead of the Mexican.

It has been asserted that *all* the trade dollars came back to us. The following summary of the coinage and export of these coins, taken from official reports, will best answer such statements.

Total coinage of trade dollars	\$35,965,924
Total export of trade dollars	29,358,292
Amount retained	6,607,632
Trade dollars returned by import	2,074,812
Amount stocked	8,682,444
Redeemed by U. S. Treasury	7,689,036
Unaccounted for (probably used in the arts)	993,408

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REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Outlines of Economics. By RICHARD T. ELY, THOMAS S. ADAMS, MAX O. LORENZ, and ALLYN A. YOUNG. Third revised edition. (New York: The Macmillan Company. 1916. Pp. xiii, 769. \$2.10.)

A thoroughgoing revision of this useful text has been made by the same editors who had charge of the second edition. "Professor Young has had general editorial supervision of the revision as a whole." The plan of the book, as well as the underlying theory is unchanged. A chapter on Labor Legislation has been added. The chapter on the Economic Activities of Municipalities has been omitted; that on the Relation of the State to Industry is missing, but a considerable part of its content is transferred to an earlier chapter. There is a new section on social insurance, also, and there are minor changes in the arrangement of chapters and parts of chapters. Not all of these changes commend themselves to the teacher. In the new text, for example, the chapter on wages is separated by two chapters from the concluding discussion of the theory of distribution, and the alternative theory of socialism is not met until three intervening chapters have been covered. From the pedagogical standpoint, the best plan in handling this difficult subject of distribution would seem to be to present it as a compact and interrelated whole, with all needed introductory matter in earlier, and all subsidiary and corollary material in later, chapters. There should be no diversion of student interest or dissipation of thought energy while this important theoretical discussion is before the class.

Praiseworthy efforts have been made to bring the text to date, account being taken of the new economic legislation and of industrial changes in the last eight years, as well as of the flood of new literature in governmental documents, reports of commissions, and the book output of the period. Examination of the changes made necessary by such developments amaze one by their all but ubiquitous frequency. Few subjects are untouched and while the rural credit associations law of July, 1916, has been included, there are later important developments which could not be incorporated; *e.g.*, the Adamson law and the new federal workmen's compensation act. It is literally true that such a text is in need of re-

vision before it ever reaches a class-room. The attempt to include such a press of new matter has resulted, frequently, in extreme compression. This is markedly true, for example, in the seven pages devoted to the newly included subject of social insurance (p. 587 *et seq.*). The difficult and important subjects of sickness, old-age, and unemployment insurance are handled in from twenty to thirty lines each. The paragraphs are models of compact statement, of the art of compressing much into few words and phrases. But can we rightfully expect large results from offering such paragraphs to college sophomores? May not a question be raised, in this connection, as to the position of the hard-pressed college instructor who has no such device as a joint board of editors to resort to in the face of the great volume of economic materials and developments? When syndicalism, for instance, must be treated in fourteen lines (p. 631) is it not time to discuss the overcrowded character of the course and text, and the desirability and possibility of relief? This could be attained by omission; by relegating some subjects to a preliminary semester's work; or by restricting the field of sophomore-year work and selecting a part of this superabundant material for the status of advanced work. "Rich diversity and spacious amplitude" have outgrown in their ceaseless expansion the possibilities of a one-year course.

Consideration of certain important omissions reinforces this query as to the propriety of revision of the field covered. I have found in the text no adequate discussion of the theory of the shorter hours movement, and the wage problem thus raised. Yet recent developments demand that every citizen understand it. There is no mention of the constitutional controversy in the minimum wage discussion, yet the delayed decision of the federal Supreme Court will soon arouse a flood of public discussion on the subject. There is no positive theoretical attack on the thorny subject of unemployment, an omission the more regrettable since it is stated to be an important socialistic point of attack (see p. 633) and since such discussion is needed as a basis for the discussion of unemployment insurance. Not to multiply illustrations unduly, there is no adequate consideration of the current development of scientific management (but see p. 117) with its relation to trade unions and to wages and profits. Yet this is a subject which an alert class will hardly allow an instructor to forget. And these all are subjects inherent in the theoretical analysis of

the current economic situation, which seems to be the essential business of an introductory course.

Changes in doctrine are relatively few. This is evidenced by the fact that the chapters on distribution are unchanged, except that profits receives a new treatment. Wages of management is handled as before, but the balance of such income becomes "pure profits" and is explained as due to the fact that "competition does not work perfectly" and that economic activity is not reduced to "sheer routine." There is an enlarged emphasis on subjective value also, the phrase "normal value" gives place to "normal price," and there are some changes in definition. A wished for change in the statement that rent, wages, and interest are "prices paid" is not granted us. Yet experience with the text shows that it makes unnecessary confusion. These incomes are more frequently "imputed" or "ascribed" than "paid." Space should be found to extend a cordial welcome to a bit of splendid and helpful exposition in the rewritten and much improved chapters on money. In the section headed *The Mechanism of General Changes in Prices* (p. 325), the student's attention is directed to the process by which the changes work out; he is taken into the banks, factories and markets, so to speak, and aided in thinking about what happens there. This is a method of exposition of which, for its stimulus to active thinking and its impress of reality, we cannot have too much. And to many teachers this section must come as a response to a felt need.

Certain controversial matter will arouse dissent and interfere with the acceptance of the text. This is true of the discussion (p. 508) of the admittedly controversial doctrine of the possibility of definitely apportioning railroad revenues. Those who have labored through the much vaunted "complete apportionment" in the Wisconsin case of *Buel v. C. M. and St. P. Railway*, will have good ground for feeling that state pride influenced the inclusion and support of the doctrine. Dissent may be expressed also to the statement (p. 632) that government ownership spells socialism. This unnecessarily prejudices the discussion of the desirability of government ownership. And few socialists allow that with the great inequality of incomes in government service and the maintenance of bondholders' rights, this can be called socialism. And again, it does not increase one's allegiance to the text to read the unrevised statement that the labor organization "is brother to the trust, akin to the combination, and thus not untainted with

monopoly. One of the most searching criticisms directed against the labor organization is that it exhibits all the evil tendencies of monopoly." Monopoly means control of prices through control of supply and the above stark statement accords ill with the discussion (p. 431) of the supply of labor. Even the employers' associations do not accuse the unions of controlling birth-rates and immigration streams and no lesser control can make them "brother to the trust." It is difficult also to make this statement accord with the sympathetic discussion (see p. 472) of the labor clauses of the Clayton anti-trust act. If the union "exhibits all the evil tendencies of monopoly" it might be expected that anti-trust laws would "throw a cloud" upon the movement. Yet there is implied dissent here. Finally in the discussion of the unearned increment (p. 422) are statements which ring strangely. The fact that "the increase in land values can be foreseen" and "taken into account and discounted," can hardly be expected to prove that "it can rarely be unearned." A spendthrift heir who foresees and trades on the approaching death of his parent hardly by that token deserves or earns his inheritance. Yet he may "translate it into present worth" and add it to his debt-incurring capacity. The phrasing is at least unfortunate as an offering for sophomore discrimination.

Experienced teachers of the text may find cause for regret that there has not been thoroughgoing revision and exorcism of the underlying revolutionary philosophy. The federal reserve legislation was not so much revolutionary as an adjustment of banking structure to the facts of industrial revolution. In workmen's compensation our wave of legislation was not the result of attention to European practice, nor yet of sheer intellectual consideration of human rights and abstract justice; it came because industrial evolution had changed the basic organization on which the older individualistic philosophy depended. Where, as on the farms, that basic organization persists, the older practice of individual responsibility persists. It is high time that this result of our historical economics were incorporated into current belief—into the everyday, customary apprehension of the American citizen. Which is to say that our sophomore economic students are entitled to know that changes in economic legislation are, and in the future will repeatedly become, essential because of progressive industrial evolution, by the necessity of adjusting our laws and social machinery to the enlarged areas of production and compe-

tion, to the greater density of population, to the increased complexity and diversity of classes. It is not a revolutionary change in social relations, nor yet a revised standard of justice that causes changes. It is rather the sensible and necessary fitting of the legislation to vast changes in industrial and social organization. And our texts in elementary economics should give the support of such plain and sensible teaching to the needed changes in railroad and labor laws, as well as in other fields. It should be added that in the new edition much gain has been made in this direction by minor revision and excision.

Few changes due specifically to the use of the text in college courses appear. The final chapter on the History of Economic Thought is presented, with slight changes, as Appendix A, displacing the slightly useful Statistics of Public Expenditures. And the old Appendix B with its lists of subjects and titles gives place to Suggestions for Students and Teachers, consisting very largely of a classified and well-considered bibliography. The meager index of the second edition is very much enlarged and correspondingly more helpful. The "references" appended to chapters have been revised and account taken of recent literature. But the lists of questions are often unchanged or are shortened. This is surprising considering the large output of exercise books and student manuals in economics. Moreover, in at least three universities the lists in question have been tried and found not serviceable. They frequently demand use of unavailable references, since the general class is large and the minimum amount of exercise and problem material based directly on the text is included. It would seem that student manual literature impressed the authors rather less than any similar volume of literature in which they might have been expected to evince interest. Yet these questions can be made serviceable and the space thus filled could unquestionably be better used.

Final conclusions from reviewing this book are that the text while maintaining its identity has yet grown not in size only but in character and maturity; that it has been successful in including a vast amount of new material, in taking account of recent developments, and in thoroughly revising all sections. If not up to date today, it is as near being so as we can expect in these days of rapid development. Criticisms are due to the inclusion of controversial matter; to the attempt to be all inclusive; to a strain of revolutionary philosophy; and to the fact that the text

is written from the standpoint of the subject and of scholarship rather than with an eye single to the student and the class-room.

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Current Economic Problems. A Series of Readings in the Control of Industrial Development. Edited by WALTON HALE HAMILTON. (Chicago: The University of Chicago Press. 1915. Pp. xxxix, 789. \$2.75.)

Exercises in Current Economics. By WALTON HALE HAMILTON. (Chicago: The University of Chicago Press. 1916. Pp. xii, 105. \$50.)

These *Readings*, and the *Exercises* which Professor Hamilton has prepared to be used with them, reflect unmistakably the idea that the inductive method is the best one to use in the teaching of economics. Two questions assert their right to consideration, at the outset, in any judgment of the book. First, Is the inductive method, alone, without the use of any text except a book of readings (backed up by printed problems and questions), the most economical and effective method? and secondly, granting that it may be, Is this book, in the hands of the average teacher, likely to be a suitable instrument and medium of instruction?

The reviewer is torn between admiration of Professor Hamilton's industry and his ferret-like power to smell out stimulating passages in the most obscure byways of economic literature—and some that is not economic—and a feeling that somehow this industry and the undoubted keen analytical power behind it would have been turned to better advantage had they been directed to the production of an original book. Professor Hamilton, under a natural, but perhaps extreme, reaction against the conventional methods of economics instruction, has gathered together 382 selections, varying in length from a few lines to a very few pages (the average length is 2 1/3 pages), divided into 96 subgroups, and 14 chapters. At the very start of his introduction, he raises the old question, but certainly one which is philosophically and practically fundamental to any constructive social science today, whether there are "problems" or only a "social problem." His *selections* deal with "problems"; scarcely, if at all, with the social, or economic, problem—perhaps because so little has been written in economic literature from the viewpoint that society is an organic whole. But *his own viewpoint* is that of the unity of

all economic processes and relations. Speaking of the questions covered by the selections, he says that "as separate problems they are merely aspects of a larger reality . . . each involves something of almost every phase of our complicated life." And again, "their essential unity makes the word 'problems' in the title unfortunate." "The object of this volume," he says, "is to present *a general view of the whole as a necessary preliminary to the study of particular problems.*"¹

The book is thus paradoxical. The solution of the paradox can be found only in the personality and ability of the teacher. The editor's own main introduction and his chapter introductions are admirable in their content, and especially in their design to link the material together. But in and of themselves they are far from adequate to any such task. It is just here that the main question as to the validity and desirability of an inductive method, rigidly adhered to, comes. Can the student, no matter how able the teacher, or how small the class, get from "readings" and class discussions, without the aid of a unifying text and piloting and summarizing lectures in some considerable number, anything like a conception of the unity of social problems, or much of that ability at *continuous* thought, driving through to essentials, which is absolutely necessary if economists are to be very far ahead of the superficial journalistic enthusiast in their treatment of vital questions? One cannot escape the fear that a book of abbreviated paragraphs may have much the same influence as our American newspaper and popular magazine—to aid still further in the destruction of what little power of sustained attention and thought our choppy and overloaded public school curriculum has left us.

The fundamental adverse criticism is, then, *cui bono?* And this is directed not at Professor Hamilton's avowed purpose, which is right, but at the means he has chosen—or perhaps it is the rather a criticism of the whole conception of the purpose, if there be a purpose, which actuates the teaching of economics in this country. We start off with the "antecedents of modern industrialism." Very good—we need a historical background. Then we study the industrial revolution, and pass to social control in modern industrialism. Here, glancing at the "nature of progress" in passing, we read some thirty selections, the main tenor of which is the conflict between *laissez faire* and state control. Then we take up "the pecuniary basis of economic organization." Thus

¹ Italics the reviewer's.

far a sense of unity and continuity of economic phenomena does not desert us. But from here on that sense is largely missing. We apparently relapse into specific study of specific problems—the business cycle, international trade, railway regulation, monopoly, population, economic insecurity, trade unionism, social reform, and taxation. The list reads like the table of contents of the “applied” part of any text in economics; and suggests the thought that most of our texts and courses finally get lost in a maze of details. Suppose a student gives a year to these 90-odd topics and subtopics. If he is going on to advanced courses in economics, does he need this sort of sight-seeing trip through all the beaten highways of economic “problems”? We leave this unanswered. *But if he is not going on, this is not the kind of pabulum he should have.* This is true whether this book is to be used in the introductory course or in a second survey course. Somewhere in our teaching of economics we ought to lead the student out of the trees and give him a view of the forest. Sometime, amid all the welter of specific problems, he should be led to consider political economy, social economy, *world* economy, in those large wholes, and in that wide perspective, which alone can make the study of social science really constructive.

The reviewer cannot escape the fact that the average college student's time is limited to four years, that our high school curriculum, in its lack of adaptation to the modern fundamentals of a social education, does not equip the student either with knowledge or interest to think about social problems, let alone “the social problem,” and that, moreover, the college curriculum itself is cluttered with requirements of logical and traditional, but doubtful, value, when measured by the demands society must make upon knowledge and mental vision. Social science departments should aim first of all not at the production of special experts, even in embryo, nor yet at the orientation of the student in every social and economic problem that happens to be troubling the community, but at bringing the student to a consciousness of the irony of the world situation and to a search for its causes. Unless we, teachers and students alike, make a mighty attempt to see economic and economico-moral situations and values not only in national but, far more, in world perspective, we might nearly as well convert our social science departments into business colleges—a tendency which has already gained gratifying headway.

Professor Hamilton will doubtless be the first to agree with this

conviction. We are questioning the purpose and the vision of economics teaching as a whole, not Professor Hamilton's purpose. But we do question his method and his medium, and doubt whether very many teachers will be found capable of making them really work. One thing is sure: such a book will either have to be used without a text and made practically the whole basis for discussion (in which case the chances are, under any ordinary teacher, that the student's knowledge and grasp of economic problems will be like the book, exceedingly choppy) or, if used as reading collateral to a text, the student will be baffled and confused by the array put before him. It was perhaps a feeling that this difficulty might be encountered that led Professor Hamilton to prepare the book of exercises.

It would perhaps be an exaggeration to say that the European war, partially revealing as it has the insecurity and hollowness of our social organization and the illusory character of what we call civilization, has rendered every text in social science thus far published out of date—but it would not be a very great exaggeration. Let us hope that Professor Hamilton will have early opportunity to revise or enlarge this book. Then may we not expect him to give over his conventional treatment of international trade and include some selections to point the way to the relation of trade rivalry to diplomacy and war. And to include a longish chapter on consumption? And to indicate that the "control of industrial development" is wrapped up with the psychology of profits, of nationalism, of materialism?

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To be reviewed.

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PARSONS, E. C. *Social rule*. (New York: Putnams. 1916.)

RUSSELL, B. *Principles of social reconstruction*. (London: Allen & Unwin. 1916. 6s.)

RYAN, J. A. *Distributive justice. The right and wrong of our present distribution of wealth*. (New York: Macmillan. 1916. Pp. xviii, 442. \$1.50.)

To be reviewed.

SCHELLE, G. *L'économie politique et les économistes, avec une introduction sur l'économie et la guerre*. (Paris: Doin. 1916. Pp. 400. 6 fr.)

TREVER, A. A. *A history of Greek economic thought*. (Chicago: Univ. Chicago Press. 1916. Pp. 161. 75c.)

The author well says in his short preface which dates the volume (November 1, 1915) that a study like his of Greek economic theory may serve the double purpose of awakening Greek scholars to phases of Greek thought too little regarded by them and of reminding modern economists how much they have in common with the Greeks. In economic histories it is certainly the difference rather than the common element that receives emphasis.

The ground has probably never been surveyed so thoroughly by an English or American writer, nor even by any foreigner. Dr. Trever confesses his own sympathy with the general attitude of Greek writers towards economic subjects, so far as their writings can be said to show a general attitude. To use his own words he "reinterprets Greek economic theory in the light of our modern humanitarian economy" (preface). The latter turns out to mean broadly the economic views of Ruskin; and criticism of Dr. Trever in the matter of first principles would be the criticism usually directed by economists against Ruskin. Our author's adhesion is not indiscriminating (see pp. 64 and 92, note), but to some of us his estimate of Ruskin will have the same exaggeration as Ruskin's estimate of Xenophon (p. 64). It is "to be remembered at the same time that the expositor is not called upon to set forth his own positive views fully. We have the materials fully presented for our own judgment. Even the minor works and authors are gathered in.

The printer has served our author well. In the numerous Greek quotations the slips are few and not vital. The projected history

of Greek economic conditions (see preface) would seem a natural counterpart to this book, and even if having less novelty will certainly be instructive. Economic theories least of all theories grow up *in vacuo*.
JAMES BONAR.

Five hundred practical questions in economics. For use in secondary schools. By a special committee of the New England History Teachers' Association. (Boston: Heath. 1916. 25c.)

Economic History and Geography

Readings in the Economic History of the United States. By ERNEST LUDLOW BOGART and CHARLES MANFRED THOMPSON. (New York: Longmans, Green and Company. 1916. Pp. xxvii, 853. \$2.80.)

Students of economics in general will find this book useful as a guide to material if not a small storehouse of data, as will also those college classes in American economic history for which it is primarily designed. The material here gathered into convenient compass, though filling 850 pages, is virtually all drawn from contemporary sources, largely official documents and accounts of investigators and observers; and illustrates conditions in this country regarding such main points as agriculture, manufactures, the tariff, transportation, money, banking, the labor movement, and population.

A comparison with Callender's *Selections from the Economic History of the United States, 1765-1860*, shows that this later collection of readings is by no means a duplicate of the former. The present volume covers wider ground, as it traces the main lines of economic development from the beginning of colonization to the present. The greatest emphasis is laid on the period between 1808 and 1860, over one half the book being devoted to that, and one quarter each to the years before and the years since. Though of necessity some references here are the same as in Professor Callender's book, yet for the most part Dr. Bogart and Dr. Thompson have included an impressive number of different readings and have made a different emphasis. For instance, the fourteen texts illustrating the westward movement, 1817-1860, are all drawn from other sources than those in Callender's on the same topic; again, four documents are devoted to the matter of paper money during the Revolutionary period where the earlier book gives one.

A rare paper (p. 26) concerning the British system of granting

lands (1773), taken from the Earl of Dartmouth MSS., is especially noteworthy. Exigencies of space probably required that only half a page be given to such an important business as the fur trade. The whole is outlined and edited with admirable definiteness. Each text is preceded by a brief, illuminating note that gives the setting of the article; and the thing to be learned from each article is made the heading for the selection rather than the title of the book from which it is taken, a device that will prove helpful to the undergraduate mind, at least.

The task of selection, as the authors say in the preface, was the great difficulty. To show how well this has been met, one may cite the four readings on trusts: "The Tendency to Consolidation, 1901," from the report of the Industrial Commission; "The Causes of Consolidation, 1901," by the Commissioner of Corporations; "The Alleged Advantages of Combination, 1897," from the report of a joint committee of the New York legislature; "Effects of Industrial Combinations upon Prices and Wages, 1900," by J. W. Jenks, in a bulletin of the Department of Labor.

There is an excellent index. No bibliography has been included as the footnotes furnish all necessary information.

AMELIA C. FORD.

Milwaukee-Downer College.

La Legislacion Inmobiliaria Tuncina. By ERNESTO QUESADA. (Buenos Aires: Academia de Derecho Y Ciencias Sociales. 1915. Pp. 867.)

This work is so important that, although a review of it in the proper sense is out of the question, from lack of space and its method of treatment, it should be called to the attention of students of the subject. The book is the first of a proposed series of about twenty volumes intended to give the results of an examination of the land tenure systems of countries which have adopted the Torrens system of registration. The investigation was undertaken by Professor Quesada on commission from the Argentinian government in order to lay a foundation for land reform in Argentina. The purposes were both fiscal and economic: to secure a system of easier transfer, better adapted to taxation; and also to furnish a better basis of land credit, and lower the rates of interest on mortgages.

Professor Quesada set out with characteristic thoroughness to make the inquiry world wide and complete. In preparation for

his work he visited practically every country where the Torrens system prevails in whole or in part, from Austria to Australia, New Zealand, Singapore, Philippine Islands, Hawaii, and the United States. An investigation of the system of Tunis was obviously proper, not only because the Torrens system is in use there, but because Tunis is a French protectorate with laws more or less similar to those which obtain in all countries that have derived their legal systems ultimately from the Civil Code.

When introduced into the protectorate of Tunis by the French government, the Torrens system met with considerable opposition from the Mussulman subjects. Gradually, however, it has won its way into their confidence so that it has established a feeling of security of proprietary rights even among the Arabs.

The work is virtually a commentary on the Tunisian land code. It recites the code article by article, and follows each with critical comments, with a view to Argentinian conditions.

First established in 1885 the code has been amended in succeeding years, and in the author's opinion has produced results of great importance to the protectorate. Under the law there have been registered 1,012, 652 hectares, with a value of 163,936-469 francs. Certificates of title have been issued to the number of 17,095, concerning which Professor Quesada makes the significant remark that they are like "fiduciary money" because they are eagerly demanded as a basis of credit.

The system has justified itself by making possible agricultural projects for the improvement of the soil, the erection of municipal works, and "a thousand manifestations of colonial expansion, in these 29 years." Of the 11,900 applicants for registration under the law between 1886 and 1911, 4,775 were Arabs, 3,313 were French, and 3,812 were foreigners. The author calls experience under the law "a true sociological experiment in the living laboratory of a whole people." He describes in detail the required legal procedure under the code and some of the economic consequences of the system. The definition of real property under the law, registry, security, and transfer of title, copyhold, mortgages legally and economically viewed, and servitudes, are among the principal topics. The author discusses not only the existing law, but projected reforms. Among the most interesting of these are three proposals for the reorganization of the mixed tribunal or court of French and Arabs before which cases under the land system come. All three proposals show the tendency so common in projects for administrative reform—to create an organization

complex enough to provide mechanically for all details. Professor Quesada criticises these projects as being too detailed to work well. His comments and criticisms, both legal and economic, show wide knowledge, perspicacity and good judgment. An appendix to the book is a description of the topographic service of Tunis.

This work should be on the reference shelves of students of land tenure. It is, indeed, monumental in its conception and thus far in its execution shows a thoroughness that has usually not been attributed to writers on this side of the Atlantic.

DAVID KINLEY.

University of Illinois.

NEW BOOKS

ALVORD, C. W. *The Mississippi Valley in British politics. A study of the trade, land speculation, and experiments in imperialism culminating in the American Revolution.* Two volumes. (Cleveland: The Arthur H. Clark Company. 1917. Pp. 358, 396. \$10.)

To be reviewed.

BARKER, J. E. *The foundations of Germany; a documentary account revealing the causes of her strength, wealth and efficiency.* (New York: Dutton. 1916. Pp. 289. \$2.50.)

BLAKESLEE, G. H., editor. *Problems and lessons of the war.* (New York: Putnam. 1916. Pp. 424. \$2.)

Among the subjects discussed are "The economic position of the United States at the close of the war" and "Economic aspects of the war."

BOUCHER, C. S. *The nullification controversy in South Carolina.* (Chicago: Univ. Chicago Press. 1916. Pp. xi, 399. \$1.50.)

"So much attention," says Mr. Boucher, "has been given to speculations on the theory of nullification from the standpoint of the theory of political science, that the history of the party contest has been neglected." To remedy this defect he gives us a long narrative in which every phase of nullification is treated in detail. Newspapers and the manuscripts of Jackson, Poinsett, and James H. Hammond form the chief source of information: and the book shows that they have been used industriously and with discrimination. It has, also, the distinction of presenting the story of nullification in a strictly neutral manner. Most writers who have told the story have not been able to conceal a leaning for either the national or the South Carolina side of the controversy. The burden of the book is the internal political conditions in South Carolina, and much is said about the uniform sentiment in the state, as revealed in the newspapers. Lack of emphasis is an obstacle against which the reader of this book must struggle. It mars what is otherwise an excellent narrative of an important incident in our history.

J. S. B.

CASSEL, G. *Germany's economic power of resistance*. (New York: Jackson Press. 1916. Pp. viii, 80. 50c.)

D'AUTREMERE, J. *The Japanese empire and its economic conditions*. Translated from the French. (London: Unwin. 1916. Pp. 319. 5s.)

DICKINSON, G. L. *Economic war after the war*. (London: Union of Democratic Control. 1916. Pp. 20. 2d.)

DRYER, C. R. W. *Elementary economic geography*. (New York: Am. Bk. Co. 1916. Pp. 415. \$1.28.)

FAULKNER, H. U. *Chartism and the churches. A study in democracy*. Columbia University studies in history, economics and public law, LXXXIII, 3. (New York: Longmans. 1916. Pp. 152. \$1.25.)

To be reviewed.

FAYOLLE, B. *Les forces économiques des puissances belligérantes avant la guerre*. (Paris: Berger-Levrault. 1916. 0.60 fr.)

HAYEM, J., editor. *Mémoires et documents pour servir à l'histoire du commerce et de l'industrie en France*. Vol. 4. (Paris: Hachette. 1916. Pp. xxxi, 319.)

HUVELIN. *History of continental commercial law*. (Boston: Little, Brown. 1916.)

INSULL, S. *The progress of economic power generation and distribution*. (Chicago: S. Insull. 1916. Pp. 55.)

JACK, J. C. *The economic life of a Bengal district; a study*. (New York: Oxford Univ. Press. 1916. Pp. 158. \$2.50.)

JONES, C. L. *Caribbean interests of the United States*. (New York: Appleton. 1916. Pp. viii, 379. \$2.50.)

To be reviewed.

KOHLER, M. and WOLF, S. *Jewish disabilities in the Balkan States*. Publications of the American Jewish Historical Society, no. 24. (New York: Jewish Historical Society. 1916. Pp xi, 169.)

Describes the efforts of the United States to bring about a reform, with particular reference to the Congress of Berlin.

LE BARBIER, L. *La côte d'ivoire agriculture, commerce, industrie, questions économiques*. (Paris: Larose. 1916. 5 fr.)

LEHFELDT, R. A. *Economics in the light of war*. (London: Wesley. 1916. Pp. 56. 1s.)

MCCANN, M. A. *The history of Mother Seton's Daughters, the sisters of charity of Cincinnati, Ohio, 1809-1917*. Three volumes. (New York: Longmans. 1916.)

MCCLELLAN, G. B. *European economic policy*. (Princeton, N. J.: Falcon Press. 1916. Pp. 59.)

MILLETT, F. B. *Craft-gilds of the thirteenth century in Paris*. Bulletin of the department of history and political and economic science in Queen's University, Kingston, Ontario, Canada, no. 17. (Kingston, Ont.: Jackson Press. 1916. Pp. 23.)

MILLIoud, M. *The ruling caste and frenzied trade in Germany*. (Boston: Houghton Mifflin Company. 1916. Pp. 159. \$1.25.)

Although written by a neutral, this book is less reserved in tone than the one by Naumann, noted below, and also less important. The author's criticism of German politics covers ground that has been already pretty thoroughly traversed (by Professor Veblen among others); and his assertions of the economic motives driving Germany to the war, while they accord with common suspicions, still lack convincing proof.

C. D.

NAUMANN, F. *Central Europe*. Translated by C. M. Meredith. (London: King. 1916. Pp. xix, 354. 3s. 6d.)

Professor Ashley's introduction to this translation of *Mittleuropa* says that it is "far and away the most important book that has appeared in Germany since the world-conflict began." Whatever influence it may exercise on the formation of a great commercial state from the central powers and their dependent territories, the book deserves a place of its own. It is agreeably written and is in large part free from the partisanship and passions which the war has excited. It is a thoughtful study of recent economic and political history, and a courageous attempt not only to formulate the problems of the near future but also to indicate some of the conditions of their solution. Those who are interested in contemporary politics and commercial policy will find the book interesting and profitable.

C. D.

NEWELL, E. T. *The dated Alexander coinage of Sidon and Ake*. (London: Oxford Univ. Press. 1916. 12s. 6d.)

OLCOTT, C. S. *The life of William McKinley*. Two volumes. (Boston: Houghton Mifflin. 1916. Pp. xvi, 400; viii, 418.)

PERREAU-PRADIER, P. and BESSON, M. *La guerre économique dans nos colonies*. (Paris: Alcan. 1916. 3.50 fr.)

PINGAUD, A. *Le développement économique de l'Allemagne*. (Paris: Berger-Levrault. 1916. 0.75 fr.)

QUESADA, E. *La nuevo Panamericanismo y el Congreso Científico de Washington*. Review of the University of Buenos Aires, vol. 32. (Buenos Aires: Ministry of Agriculture. 1916. Pp. 364.)

This is a report to his government by Professor Quesada of the proceedings of the Pan American Scientific Congress, held in Washington in December, 1915. Naturally, the work deals so much more largely with other parts of the program than the economic, that an extended notice in this REVIEW would be hardly appropriate. The main interest lies in the author's view of what he calls the Wilsonian doctrine of the new Pan-Americanism expounded at

the time of the congress, but quietly allowed to fall into the background of public attention since that time. Needless to say, the doctrine does not commend itself in all respects to the author or his South American colleagues.

D. KINLEY.

ROSENBLATT, F. F. *The chartist movement. In its social and economic aspects.* Columbia University studies in history, economics and public law, LXXIII, 1. (New York: Longmans. 1916. Pp. 453. \$2.)

To be reviewed.

SARKAR, B. K. *The industrial development of Japan.* (Benares: Tara Prtg. Works. 1916. Pp. 52.)

SCHERER, J. A. B. *Cotton as a world power. A study in the economic interpretation of history.* (New York: Stokes. 1916. Pp. 453. \$2.)

To be reviewed.

SLOSSON, P. W. *The decline of the chartist movement.* Columbia University studies in history, economics, and public law, LXXIII, 2. (New York: Longmans. 1916. Pp. 216. \$2.)

To be reviewed.

WASHBURN, C. G. *Theodore Roosevelt. The logic of his career.* (Boston: Houghton Mifflin. 1916. Pp. 245. \$1.50.)

Mr. Washburn writes as an intimate friend of Mr. Roosevelt who differs with him in political views. He shows us the personal side of the founder of the Progressive party in an appreciative manner. The critical note is wanting, and the book, intended for popular use, contributes little to the political history of the period with which it deals. The most interesting chapter to the readers of this REVIEW is the second, dealing with Changing Social and Industrial Conditions. It discusses in an entertaining way the change that came into our political ideas and aims about 1900. Up to that time politics had been influenced by the spirit which the Civil War kindled. The Republican party lived in the spirit and the organization that had been developed in the struggle for the Union: after 1900 problems connected with good government, the distribution of wealth, and the influence of money in politics became insistent. Roosevelt came upon the scene in the second period. Before that he had played little part, because he could not accept the ideals of the old régime. He threw all his force into the new. "He was not hampered by either a business or professional experience."

He encountered a world ready for his leadership. Congressmen were under the old influence; and the people wanted a man who would act boldly. Changed industrial conditions had led the manufacturers to form trusts and other combinations. The public demanded that they be restricted, while the trusts themselves were in a defiant attitude. Roosevelt demanded that they be supervised, not destroyed; but neither the trusts nor the people paid attention.

The former treated him as an opponent: the latter only knew he was a friend of those who resisted the monopolies. Between such passionate contentions there was no place for the voice of reason, which said that the trusts should exist under reasonable oversight: and that is why Roosevelt's program faded away at the end. It is true that Mr. Washburn does not announce this conclusion in so many words; but his statements lead us to it.

JOHN SPENCER BASSETT.

WEBB, S. and FREEMAN, A. *Great Britain after the war*. (London: Allen & Unwin. 1916. Pp. 80. 1s.)

WERGELAND, A. M. *History of the working classes in France. A Review of Levasseur's "Histoire des classes ouvrières et de l'industrie en France avant 1789."* (Chicago: University of Chicago Press. 1916. Pp. vi, 136. \$1.)

This review, written by Dr. Agnes M. Wergeland, late professor of history in the University of Wyoming, was first published in the *Journal of Political Economy*. It presents a faithful and sympathetic summary of some of the main topics in the two large volumes of the original work.

C. D.

WORK, M. N. *Negro year book. Encyclopedia of the negro, 1916-1917*. (Tuskegee, Ala.: Tuskegee Institute. 1916. Pp. x, 488.)

Contains sections on economic conditions (pp. 1-15), occupations (pp. 295-301), agriculture (pp. 305-315), business (pp. 318-334), population (pp. 364-389), and bibliographies (pp. 418-455).

Japan year book, 1916. (San Francisco: A. T. Masuda, 448 Bush St. Pp. xiv, 766.)

Memorandum on the industrial situation after the war. The Garton Foundation. (London: Harrison. 1916. Pp. 95. 1s.)

One hundred years, 1816-1916; the chronicles of an old business house in the city of Philadelphia. (Philadelphia: W. H. Horstmann Co. 1916. Pp. 54.)

Agriculture, Mining, Forestry, and Fisheries

NEW BOOKS

BITTING, S. T. *Rural land ownership among the negroes of Virginia. With special reference to Albermarle county. Phelps-Stokes fellowship papers*. (Charlottesville: University of Virginia. 1916. Pp. 110.)

BOHANNAN, C. D. and CAMPBELL, D. P. *A preliminary study of the marketing of Burley tobacco in Central Kentucky. No. 1 of a series of studies on the marketing of Kentucky farm products*. (Lexington: Kentucky Agricultural Experiment Station. 1916.)

CADY, G. H. *Coal resources of district VI. Illinois coal mining investigations. Coöperative agreement. Bulletin 15*. (Urbana: State Geological Survey, University of Illinois. 1916. Pp. 94.)

- CHERRINGTON, P. T. *The wool industry*. (Chicago: A. W. Shaw. 1916. \$2.50.)
- CHILD, S. R. *Laws relating to rural credits and land registration. Uniform state laws relating to same*. Sen. Doc. No. 351, 64 Cong., 1 Sess. (Washington: Gov. Prtg. Off. 1916. Pp. 43.)
- DESBONS, G. *La crise agricole et remède coopératif: l'exemple du Danemark*. (Paris: Editions Juridiques, 26 Boulevard de l'Hôpital. 1916.)
- HARRIS, F. S. *The irrigation of wheat*. Utah Experiment Station bulletin no. 146. (Logan, Utah: Experiment Station. 1916. Pp. 32.)
- KERZONCUF, J. *La pêche maritime son évolution en France et à l'étranger*. (Paris: Challamel. 1916. 5.50 fr.)
- MOON, F. R. *The book of forestry*. (New York: Appleton. 1916. Pp. xvii, 315. \$1.75.)
Chapter 6 treats of "Making money out of forestry."
- NOURSE, E. G. *Agricultural economics. A selection of materials in which economic principles are applied to the practice of agriculture*. (Chicago: Univ. Chicago Press. 1916. Pp. xxv, 896. \$2.75.)
To be reviewed.
- REW, R. H. *An agricultural faggot. A collection of papers on agricultural subjects*. (London: King. 1916. 5s.)
- SCHMIDT, L. B. *Economic history of agriculture in Iowa*. (Des Moines: State Hist. Soc. of Iowa. 1916.)
- SEARS, F. H. *A system of rural credits adapted to federal reclamation projects*. (Fallon, Nev.: F. H. Sears. 1916. Pp. 31.)
- STEWART, C. L. *Land tenure in the United States with special reference to Illinois*. University of Illinois studies in the social sciences, vol. V, no. 3. (Urbana: Univ. Illinois. 1916. Pp. 135. 75c.)
To be reviewed.
- THOMPSON, C. W. *Costs and sources of farm-mortgage loans in the United States*. Bulletin no. 384. (Washington: Dept. of Agri. 1916. Pp. 16.)
- THOMPSON, C. W. *How the Department of Agriculture promotes organization in rural life*. Yearbook separate 675, pp. 272A-272P. (Washington: Dept. of Agri. 1916.)
- WEED, W. H. *A manual of North America. The mines handbook and copper handbook*, vol. XII. (New York: Stevens. 1916. Pp. 1699.)
- Facts about the land. A reply to "The land," the report of the unofficial land enquiry committee*. (London: Murray. 1916. Pp. 335. 2s. 6d.)
- The investigation of rivers. Final report*. (London: Royal Geographical Society. 1916. Pp. 92. 3s. 6d.)

Report of the seventh annual meeting of the Committee of Conservation, Canada. (Ottawa: The Commission. 1916. Pp. 283.)

Report from the tobacco division for the year ending March 31, 1915. 6 George V. Sessional paper no. 16. (London: Wyman. 1916. Pp. 1156-1210.)

Statistical information relating to stocks, cotton, grain, provisions, live-stock, and seeds, 1915. (Chicago: Howard, Bartels & Co. 1915. Pp. 54.)

Statistics of mines and quarries in Ohio, 1915. Bulletin of the Industrial Commission of Ohio, vol. III, no. 6. (Columbus, Ohio: Indus. Comm. 1916. Pp. 99.)

Weathering of coal. An investigation of the coals of Canada with reference to their economic qualities. As conducted at McGill University, Montreal, under the authority of the Dominion government. Extra volume supplementing report no. 83. (Ottawa: Dept. of Mines. 1916. Pp. xii, 194, xxiii.)

Year-book of agricultural legislation, vol. 5. (Rome: Intern. Inst. Agri. 1916.)

Manufacturing Industries

NEW BOOKS

BACON, R. F. *The American petroleum industry.* Two volumes. (New York: McGraw-Hill. 1916. Pp. 456; 519. \$10.)

FARRAR, F. A. *Factories and great industries.* (Cambridge, Eng.: University Press. 1916. Pp. 90.)

STEUART, W. M. *Power laundries. Census of manufactures, 1914.* (Washington: Bureau of the Census. 1916. Pp. 28.)

Thomas' register of American manufacturers. Eighth edition. (New York: Thomas Pub. Co. 1916. Pp. 3200. \$15.)

The production of iron and steel in Canada, during the calendar year 1915. (Ottawa: Gov. Prtg. Bureau. 1916. Pp. 48.)

Transportation and Communication

The Port of Boston. By EDWIN J. CLAPP. (New Haven: Yale University Press. 1916. Pp. xii, 402. \$2.50.)

This book had its origin in a private report prepared and submitted by the author as an expert adviser selected by the directors of the port of Boston to study the various traffic and operating problems of that great North Atlantic seaport and to suggest methods for developing the traffic of the Boston port in competition with other Atlantic ports. Professor Clapp had previously demonstrated his familiarity with the conditions affecting foreign

commerce and port development, notably in two successful books, *The Navigable Rhine* and *The Port of Hamburg*. While the present book naturally deals principally with traffic problems, these are so closely involved with the problems of port operation and the arrangements for the interchange of traffic between land and water carriers, that several chapters are necessarily devoted to the operating problems of the rail and water terminals. As a seaport is primarily a point of interchange of freight and passengers between railroads and boat lines the study of a port also involves almost equal consideration of both rail and water transportation problems; and, while the port of Boston is the focus of the discussion, much attention is given throughout to the theory of port charges and operations, and the practices of other Atlantic ports are generally cited with regard to such matters as belt lines, light-erage, elevator charges, and port industries. The author says that the whole discussion of the competition for export and import traffic of the American Middle West could as well appear in a book on New Orleans or Montreal.

Professor Clapp points out that the problem of the port of Boston, in the effort to attract commerce to the city, is not peculiar to that city alone, but that all of the North Atlantic ports have a similar problem. New York, alone, is embarrassed by so much freight seeking its ports that its problem is an engineering one involving the difficulties of handling the volume of traffic offered, while the other ports are mainly concerned with attracting a greater volume of business. After pointing out the great importance of a port in developing the business not only of the city but of the entire New England community, he analyzes the natural advantages and disadvantages of Boston's situation, suggesting improvements which will serve to attract business to the port, and also the many questions involved in the relation of freight rates to Boston as compared with those to other ports. He urges a greater coöperation with the port authorities on the part of the railroads, and explains several ways in which he believes this co-operation could be manifested; but he is exceedingly fair in giving the railroads credit for doing more than any other factor to make the port what it is and in showing that it must be made worth their while to aid in the attempt to develop the traffic of the port, rather than that they should be called upon to make sacrifices.

As a means of increasing the attractions of the port of Boston to both rail and water commerce, Professor Clapp makes several

proposals regarding changes in the system of port charges and in the methods of interchanging traffic between the railroads and water lines. He urges the necessity of greater effort on the part of Boston to advertise the advantages of the port throughout the West, as an offset to the system of differential freight rates which he considers to be discriminatory against Boston and in favor of other ports in many respects, in spite of the decisions of the Interstate Commerce Commission. And especially he urges the importance of cultivating traffic from points of origin such as New England and Canada, from which the rates are more favorable to Boston, so that the boat lines need not reduce their proportion of the through rates in order to take traffic from Boston rather than from other ports. In addition to the greater nearness of Baltimore and Philadelphia to the leading points in the Middle West, which operates to the disadvantage of Boston so far as the relation of inland freight rates is concerned, he calls attention to the fact that more ships are brought to Boston than can be loaded out, and shows the necessity of finding traffic for the outbound movement. He also urges that greater attention be paid to building up the passenger travel via Boston.

Additional water lines to the Pacific coast, to Galveston, and for the coastwise service, he deems important; and in this connection he argues that it would be a mistake for the Interstate Commerce Commission to interfere with the ownership of water lines by New England railroads.

Among the physical changes which he recommends are a greater development of the opportunity for industrial expansion in the vicinity of the port, the construction of new pier facilities in accordance with plans which he outlines, a system of carfloats for the exchange of traffic in the harbor, and a union belt line railroad to coördinate the terminal facilities of the rail carriers.

The book is a valuable addition to the literature on the subject of rail and water freight rates and operating problems, which is comparatively limited except for more formal reports and documents, and the material not only is valuable to any student of the subject but is presented in an interesting manner.

H. F. LANE.

Washington, D. C.

The Panama Canal and Commerce. By EMORY R. JOHNSON.
(New York: D. Appleton and Company. 1916. Pp. 295.
\$2.00.)

Professor Johnson is eminently qualified to prepare this volume. From its inception to its completion, he has been in intimate relationship with the Panama Canal. During the progress of construction he made several reports to the government, which were always received with great interest and accorded serious consideration.

In the opening of the second chapter of his book, Professor Johnson states clearly and effectively why the canal was built, and shows what a great benefit it is proving to be. Many statistics which will be of interest to all who are engaged in foreign or domestic trade are supplied and there are numerous maps showing the routes taken by steamers, the coaling ports throughout the world, the distance by various routes, and the time occupied in making transit.

In conducting investigations and securing data, Professor Johnson made a thorough canvass of all the principal shipping companies operating from New York and other American ports and obtained accurate information as to the methods of operating cargo and passenger steamers, the time necessary for different voyages, the consumption of coal required, depending upon the class of steamer, the nominal cost of coal at depots throughout the world, and the estimated saving in expense when the shortened voyages through the canal are taken advantage of.

These particulars have been so carefully collected that they may be considered entirely reliable—at least they were at the time the work was written and issued. The war has changed many conditions and undoubtedly further changes will follow. Owing to the danger in the Mediterranean because of the war, the amount of tonnage passing through the Suez Canal has been greatly reduced. A large portion of this would naturally have sought the Panama Canal. Unfortunately the slide that took place in September, 1915, and which was not overcome until April, 1916, prevented all tonnage from passing through the canal and forced the longer voyages around the Cape of Good Hope and Cape Horn. Now that the canal is reopened, traffic is rapidly increasing, and it is believed that very soon a much larger volume of tonnage will be availing itself of this route. The largest amount of tonnage for any month was that of August, 1915—about 700,000 tons. Even with this amount, the operating expenses of the canal and the subsidy of the Panama government are more than being met by the toll revenues; and the canal at present may be considered

to be on a paying basis, if the interest on the cost of construction is not included. It is estimated that when the tonnage reaches a volume of about fourteen million tons per annum, if present toll is continued, the entire cost of operation, subsidy, and interest on bonds will be fully paid by the canal revenues. All of these details are very fully explained by Professor Johnson, and his predictions are being carried out to a remarkable extent.

The book is written in simple language easily comprehended by the ordinary reader and is so clear in statement that trade conditions as they are influenced by canals can readily be comprehended by those having very little knowledge of maritime matters. And to those who are familiar with such matters it may also serve as a textbook that will be frequently referred to for information which cannot be procured from other sources. To students of business conditions, to travelers, to those interested in trade between the United States and foreign countries, and to our people generally, Professor Johnson's book should be of great value.

WELDING RING.

BOOK REVIEWS

CHARIGNON, A., J.-H. *Les chemins de fer chinois. Un programme pour leur développement.* (Paris: Dunod & Pinat. 1916. Pp. 222. 20 fr.)

FILLIOL, V. *Les transports commerciaux et la responsabilité des compagnies de chemin de fer avec formules et modèles et tableaux des délais de transport.* (Paris: Librairie Générale de Droit. 5 fr.)

HESS, R. H. and WHALING, H. B. *Outlines of American railway transportation.* (Madison: Univ. Wisconsin. 1916. Pp. 208. \$1.)

HORNIMAN, R. *How to make the railways pay for the war; or, the transport problem solved.* (London: Routledge. 1916. Pp. 368. 10s. 6d.)

KETCHUM, E. S., editor-in-chief. *The traffic library.* Vol. 7, *Construction and interpretation of tariffs.* (Chicago: Am. Comm. Assoc. 1916. Pp. xiii, 364.)

LEMARCHAND, G. *Le port de Paris et ses affluents commerciaux.* (Paris: Dunod & Pinat. 1916. 6 fr.)

NELSON, J. H. *Interstate commerce commission law; vade mecum.* (Washington: J. Byrne & Co. 1916. Pp. 168. \$1.)

PEABODY, JAMES. *Railway organization and management.* (Chicago: La Salle Extension Univ. 1916. Pp. vii, 263.)

This is one of a series of books on interstate commerce and rail-

way traffic. As the title indicates, its purpose is to explain the functions of the various departments of the railway and the duties of the officers and employees. The conventional diagrams of organization are freely used and are supplemented by explanatory text and more or less detailed descriptions of the duties and responsibilities of each office or position in the service. Naturally the greater part of the book consists of a detailed analysis of the three great divisions of railroad organization—operating, traffic, and accounting; but brief mention is made of the corporate organization and of certain miscellaneous departments, such as relief, pensions, publicity. Some little attention is given to the valuation work which has been forced upon the railroads by the federal government.

Certain inter-line organizations, like traffic associations and fast freight lines, are also described, though for the most part rather inadequately. The author undertakes also to compare the advantages and disadvantages of the departmental, divisional, and unit types of operating organization—without conspicuous success.

The arrangement of the book is somewhat faulty resulting in many needless repetitions. A fairly full index remedies this defect to some extent. There is also a noticeable lack of balance in the apportionment of space to the various topics. On the whole, however, the work affords the student of transportation and the layman a considerable amount of information concerning the organization and operation of a railway though it is too superficial to be of much use to a railroad man or to any one who desires an intimate knowledge of the subject.

C. W. DOTEN.

PRATT, E. A. *A London transport trust. Criticism of an impracticable scheme.* (London: King. 1916. Pp. 70. 1s.)

Annual report of the department of city transit, Philadelphia, for the year ending December 31, 1915. (Philadelphia: City Hall. 1916. Pp. 8+9.)

Annual report for the year ending June 30, 1916, of the New York Railways Company. (New York. 1916. Pp. 35.)

Comparative railway statistics, United States and foreign countries, 1913. Consecutive no. 100. Miscellaneous series no. 25. (Washington: Bureau of Railway Economics. 1916. Pp. 78.)

Trade, Commerce, and Commercial Crises

Exporting to Latin America, A Handbook for Merchants, Manufacturers, and Exporters. By ERNST B. FILSINGER. (New York: D. Appleton and Company. 1916. Pp. xiv, 565. \$3.00.)

Two qualities in Mr. Filsinger's book stand out as noteworthy: it is specific and it is comprehensive. When to this statement I

add that it is distinctly a business man's book, written by a business man who still has the student's knack of covering a subject fully and expressing himself clearly, it may easily be understood that this is one of the best publications on Latin America that has been placed on the American market. There has been in the last two or three years a flood of literature on Latin America, designed primarily to meet the demand that was supposed to have arisen from our unparalleled trade opportunity there. Most of these books bear on their face the evidence of having been hastily put together, or at least written up sketchily and superficially, and it is only occasionally that we find one which impresses us as being substantial and dependable. Even a glance through the present volume is sufficient to make us feel that this is a "first-hand" book, written by a man who knows what the American exporter must ascertain in order to get a foothold in Latin American trade; and a closer examination bears out the original impression. I should say that no business man contemplating an entrance into the Latin American field could afford to do without this book.

Mr. Filsinger approaches his subject by placing himself in the position of the manufacturer in the United States who has been attracted toward Latin American trade but knows nothing from experience about exporting either to Latin America or to any other part of the world. Such a manufacturer, if he were wise, would want to familiarize himself with the whole process of exporting, from the time when he first set out to get an order to the time when he had a substantial, established business. The book attempts to meet the demands of this sort of inquirer in two ways: by giving him as much specific information about exporting to Latin American markets as it is practicable to do in a volume of this size, and by pointing out the various sources of information and assistance open to him both in the United States and abroad, but particularly in this country. Of the two, the latter feature is especially important. Among the many writers on Latin American trade Mr. Filsinger seems to be almost the discoverer of the effective work being done by the Bureau of Foreign and Domestic Commerce, to which he devotes considerable, but by no means excessive, space.

The keynote of the whole book is the insistence on the necessity of thorough study of the subject of exporting to Latin America, not only before any steps are taken but also after the orders begin to come in. The author, however, does not confine himself to em-

phasizing the importance of such study. He goes further and outlines the manner in which the study may be undertaken and the assistance that is available in pursuing it. After a brief survey of Latin American physical conditions, for instance, he has a chapter on *How to Study the Latin American Trade Problem*, in which (1) the questions to be considered with respect to the special line turned out by the manufacturer are listed and (2) the several phases of the export process itself are set forth. The former have to do with the adaptability of the product to the differing Latin American markets, the class of population to which it would appeal, the kind of label that would be appropriate, the possibility of creating a demand if one does not exist, etc. Among the latter are emphasized such topics as the proper methods of doing business, competition, the amount of capital to be devoted to the Latin American venture, and attention to documents and details.

Following such preliminary study the manufacturer would naturally come next to the determination of the proper method to be followed, and a chapter is devoted to a review of the various methods open, such as trading through export commission houses, sending traveling salesmen, and establishing agencies. Each of these methods is then discussed in detail, with the emphasis very properly laid on selling through salesmen. When the method is decided on, the subject of handling the resulting orders logically follows, including discussions of packing and marking, insurance, freight forwarding, and shipping and banking documents. Following this is a chapter on credits in Latin America, with another on financial conditions and banking.

There is then a discussion of a number of miscellaneous subjects connected with export to Latin America, such as tariffs, catalogues, advertising, trade-marks, parcel post, and two important chapters on government assistance to exporters. Finally there is an elaborate appendix giving condensed information regarding each Latin American country, a bibliography of *Aids to Study of Export Problems*, government publications, directories, etc., a list of banks engaged in Latin American business, and a number of other miscellaneous lists and tables.

There are a few details here and there that might be corrected, and doubtless will be if a second edition of the book is issued. The page proof was evidently hastily read, and the citations to pages in the appendix are inaccurate. There are also certain inaccuracies in the description of the consular service, such as the state-

ment that "in each of the republics there is a Consul General, whose headquarters are in the capitol (*sic*)," and that "the consular service serves the Bureau of Foreign Commerce." A somewhat more important defect, perhaps, is the failure to distinguish more clearly between the functions of the export commission houses and the manufacturers' agents. These, however, are all of minor importance and do not weigh heavily against the general excellence in the conception and handling of the whole subject.

The greatest present obstacle to the increase of our trade relations with Latin America is not the lack of American banks or ships or other facilities, but the ignorance of the individual exporter as to what facilities actually exist and how to use them properly. All that can be done by governmental agencies toward making the trade channel smoother will not have a great effect until the manufacturer himself learns how to carry on his Latin American business intelligently. For doing away with the many hampering conditions and injudicious methods that exist at present in our export trade with Latin America, it is doubtful whether there is a better book available than this by Mr. Filsinger. It would certainly pay every prospective exporter to have a copy not in his library but on his desk for constant reference and study.

E. E. PRATT.

Marketing Perishable Farm Products. By ARTHUR B. ADAMS. Columbia University Studies in History, Economics and Public Law, Vol. LXII, No. 170. (New York: Longmans, Green and Company. 1916. Pp. 180. \$1.50.)

In this work the author makes a careful investigation of the methods of marketing perishable farm products, a field that is comparatively new. The scope of the work is indicated by the following chapter headings: Character and Significance of the Problem, The Present System of Marketing Perishables, Why the System is a Burden to Society, Reform of the Marketing Processes or Machinery, Reduction of Costs of Performing the Marketing Processes, and Reduction of the Burdens of Marketing by Changing the Nature of the Goods and Area of Production.

According to the conclusions of this author the present marketing processes are all necessary. But while such popular reforms as direct marketing from producer to consumer are found to be impossible even by the most successful growers' organizations, still he shows that reform of the agencies that operate existing market-

ing machinery is needed. The price of a product to the consumer has been increasing faster than the price to the farmer. The marketing cost represented by the differences between these two prices has thus been increasing. The cost of marketing perishables is greater in the United States than in Europe, where the farmer receives more and the consumer pays less. At the same time the purchasing power of the farmer and wage-earner has been decreasing. Hence the demand in the United States for reform in the marketing of farm products is becoming widespread and insistent.

In thus stating the problem it seems that the author must realize that he is dealing with a question of the distribution of wealth; that is, with the method of its apportionment among those who produce and handle farm products. But he considers marketing as entirely a part of production. In his review of the present system of marketing and in his analysis of its cost he dwells only upon activities which are mechanically necessary to put goods in the hands of the consumer. Such processes as grading, packing, transporting, storing farm products, assembling and dividing carload lots for individual consumption, whatever, in fact, is necessary for their full utilization are productive processes. But "plaiting" a basket of strawberries or "facing" a box of apples, "plugging" a car of wheat, "treating" wheat, local price cutting to drive out competitors, division of territory or coöperation to maintain prices among buyers, the purchase of goods on a rising market by commission merchants, or falsely quoting the prices prevailing upon a market, misrepresentation of the grade and condition of goods upon arrival, destroying products or storing them to prevent depression of prices—all of these practices are phenomena of common notoriety, yet they receive scarcely any attention in the chapter descriptive of the present system. All business activities which are calculated to affect prices and profits, but which are not socially necessary for the efficient utilization of goods, should be included under the head not of production but of distribution. Inasmuch as a large part of the activities of business men affects only the per cent of the consumer's dollar which the handler of farm products shall obtain, and in no wise adds to the mechanical efficiency of getting a product from the soil to the consumer, marketing is essentially a part of distribution as well as of production.

Again, when the author attempts to show what determines

prices, he treats the whole subject as settled. He has no questions to solve. He shows, according to traditional theory, how prices are determined by supply and demand.

Chiefly on the basis of traditional theory, but partly on that of the phenomena of new conditions, which the author is passing in review, he proceeds to consider possible improvements in the methods of production. But no consistent devotee of the supply and demand theory should depart from a laissez-faire policy; that is, from the assumption of the sufficiency of free competition to regulate prices without the interference of any government aid. As the passage of the various laws to regulate railroad transportation has marked a decline in the assumption of the sufficiency of free competition to regulate railroad charges, and the relationship between producers, manufacturers, shippers, and consumers, so the universal establishment of municipal, state, and federal departments of markets, which this author recommends, will ultimately mean a death blow to this theory. He says that the establishment of such agencies is necessary "to regulate the local and the state trade" in farm products, "to improve marketing and reduce its costs." Any admission of a necessity for reform of any kind is a departure from the traditional assumption of the sufficiency of supply and demand to determine all prices.

Perishable goods have not, in the self-evident fashion assumed by those who have held the supply and demand brief, reached the place where they would command the best price. Mr. Adams does not at this point diverge from traditional economic theory, but he points out a situation which is not in accord with the usual economic assumptions. He shows that there may be an ample demand, and yet a part of the supply of the goods may either rot on the farm or sell for less than the cost of their production; that prices may fluctuate widely on the same market because of the alternation of glut and scarcity, and between markets for lack of sufficient information and marketing facilities; and that prices may be low at one place and high at another at the same time. Thus the situation he describes does not indicate that there is any tendency toward one market price as has been commonly assumed. Consumers, he states, do not necessarily benefit from periods of low wholesale prices: wholesale prices vary closely according to supply and demand; but retailers are inclined to maintain customary prices; producers lose by fluctuating prices, but consumers do not correspondingly gain by them.

To remedy the admitted defects in this situation the author recommends that the federal Office of Markets should establish uniform grades and standards as an essential basis for reporting shipments from producing centers, receipts and prices at leading markets. Municipal markets should regulate retailers' business in regard to weights, measures, and soundness of the goods sold, and should help collect and publish market quotations. State departments of markets should help enforce standard grades and packages, collect and help distribute market news service. The federal Office of Markets should be the clearing house for gathering and distributing market information. In this way the supply of farm products could be made more efficient. Then this system, the author adds, should be supplemented by regulation, by the same authorities, of commission men, brokers, car-lot dealers, and retailers, to prevent "misquoting of prices, false reports as to condition of goods upon arrival, bogus sales, cornering of the markets and other unfair practices." The same departments should help farmers and shippers to present all valid complaints before state and federal railroad commissions. These agencies should also be authorized to regulate refrigeration, both stationary and in transit, and terminal facilities generally.

Mr. Adams goes farther in recommending government aid than many authorities—Mr. Weld, for instance, in his work on *The Marketing of Farm Products*; but not so far as Mr. Elwood Mead, who has the Australian and European situation in mind. According to the latter authority, investigation and publicity through bulletins put the responsibility on the farmer and local shipper, but may leave them as helpless as before unless the government gives them more substantial aid. It might be remarked that, while some in the United States recognize that individualistic competition should be and is being supplanted by organization in most industries, few realize that the government will have to give support both to farmers and consumers if they are to deal at all on a par with large capitalistic organizations. To be consistent there will have to be a complete abandonment of the laissez-faire doctrine, not only upon the part of those who advocate organization in all industries and of consumers generally, but also upon the part of those who are recommending government aid. Moreover, it will be found that government aid by court fines is accomplishing nothing constructive. Mr. Adams is to be complimented for

recommending a constructive program, part of which has already been put into effect.

WILLIAM R. CAMP.

North Carolina Agricultural Experiment Station.

NEW BOOKS

BERROGAIN, C. *L'expansion du commerce extérieur et l'organisation bancaire.* (Paris: Delagrave. 1916. Pp. 214. 2.50 fr.)

BROWN, H. G. *Principles of commerce. A study of mechanism, the advantages, and the transportation costs of foreign and domestic trade.* (New York: Macmillan. 1916. Pp. xxiii, 207. \$1.75.)
To be reviewed.

BYERS, N. R. *World commerce in its relation to the British empire.* (London: King. 1916. 1s. 3d.)

JUDSON, J. *Trade after the war; the British machine tool industry.* (London: Judson-Jackson Co. 1916. Pp. 30. 2d.)

JUGLAR, C. *A brief history of panics and their periodical occurrences in the United States.* Third edition. Translated and edited with an introduction and brought down from 1889 to date by DECOURCY W. THOM (New York: Putnams. 1916. Pp. viii, 189. \$1.00.)

Probably no book on business cycles has had a wider circulation in the United States than Mr. Thom's adaptation of Juglar. The present edition differs from its predecessors by continuing the historical sketch of American "panics" from 1891 to 1914. Mr. Thom credits us with having had panics not only in 1893 and 1907, but also in 1897 (which was really a year of business revival), 1903, and 1913. What is worse, he credits France and England with having had panics "approximately" in each of these years (p. 20). This opinion rests not on study of business conditions in the three countries, but on a misuse of the term "panic," and on a mistaken notion that panics are "practically simultaneous" in Europe and America. As so often in this field, the theory is not made to fit the facts, but the facts to fit the theory. W. C. M.

LAMBERT, H. *International morality and exchange.* (London: Allen & Unwin. 1916. Pp. 40. 6s.)

NORTON, T. H. *Dyestuff situation in the United States.* Special agents series no. 111. (Washington: Dept. of Comm. Bureau of Foreign and Domestic Comm. 1916. Pp. 19.)

WENDEL, H. F. *Wendel's up to date list of export commission houses in the United States.* (New York: H. F. Wendel. 1916. Pp. 33. \$10.)

Business and Europe. (Boston: National Shawmut Bank. 1916. Pp. 17.)

European economic alliances. A compilation of information on inter-

- national commercial policies after the European war and their effect upon the foreign trade of the United States.* (New York: Nat. Foreign Trade Council, India Sq. 1916. Pp. 118. 25c.)
- Exporters' encyclopedia.* (New York: Exporters' Encyclopedia Co., 78 Broad St. 1916. Pp. 1175. \$7.50.)
- Export register of New York export commission houses.* Second edition. (New York: Export Manufacturers of the United States. 1916. Pp. 319.)
- Our trade with Latin America.* (New York: Mechanics & Metals National Bank. 1916. Pp. 9.)
- The strategic trade centers of the world.* (New York: R. G. Dun & Co. 1916. Pp. 24.)
- Watch your step in Australia!* (Washington: Dept. of Comm. Bureau of Foreign and Domestic Comm. 1916. Pp. 29.)
- Le guide de l'exportateur russe en France.* (Paris: Chambre de Commerce Russe de Paris. 1916.)

Accounting, Business Methods, Investments,
and the Exchanges

- Auditing Theory and Practice.* By ROBERT H. MONTGOMERY. Second edition revised and enlarged. (New York: The Ronald Press Company. 1916. Pp. xxvi, 889. \$5.00.)

Happy is the lot of the reviewer who finds on the publication of a second edition that his task offers the opportunity to express with new enthusiasm and in new measure his appreciation of the book. Montgomery's *Auditing* is standard; and it is so largely because it puts emphasis where emphasis belongs—on intelligence and judgment, as contrasted with mechanical checking, in audits. In the minds of some, Mr. Montgomery leans over backward in this regard, for he appears to think that as a general principle "test and scrutiny" will accomplish more than complete checking. Doubtless for one with a highly developed detective instinct and long experience, that is true; but in the audit of certain fiduciary accounts, more exactness is usually required than is implied by Mr. Montgomery's general discussion—which, it is only fair to say, is based chiefly on the needs of audits of mercantile, manufacturing, and service enterprises, for stockholders, creditors (actual or prospective), or investors. That Mr. Montgomery recognizes this is shown by a specific correction of his general implication as applied to the accounts of building and loan associations, for he says (p. 566), "in an audit under such circum-

stances, tests of the work are not usually sufficient." It is regrettable that such cautions are so inconspicuous. The point that does stand out, however, reinforced in the new edition, is that the auditor is concerned quite as much with things that are not on the books (but should be there) as with book figures; and that is why auditing is not primarily a task of checking. As is well said in the new edition (p. 48), "most fraud and carelessness lie in the transactions which do not reach the books, . . . evidence of or clues to which might be found in other . . . records." No other book on auditing dwells so satisfactorily on this point or shows by such well-chosen illustrations how evidence of omissions may be detected. The new edition gives many new illustrations.

Other changes in the new edition include enlargement of the sections on internal checks (which we may hope to find still further enlarged in a later edition), on liens and hypothecations, on interest as profit rather than cost (in which Mr. Montgomery takes the point of view commonly characteristic of auditors rather than that commonly taken by cost accountants), on acceptances, on forms of statements for credit purposes, on investigations after bankruptcy, and on the basis for reasonable rates. The last of these, since auditors are largely concerned with the application of sound theory, deserves fuller treatment. Mr. Montgomery cites the Kansas City Southern case (p. 639) and the Kings County Lighting Company case (p. 643), but with virtually no comment of his own—not even reminding the reader that in the former case the Supreme Court's decision was concerned not with the merits of the case but solely with jurisdiction.

A few sections not directly connected with the subject of the book, such as the chapter on C. P. A. regulations, and the corporation tax law, have been omitted from the earlier edition.

As a whole, the changes are not of sufficient importance to cause the new edition to displace the old, but new purchasers are to be congratulated on finding the new on the market.

It is regrettable that Professor Montgomery lends himself to the tendency among writers on business subjects to destroy the paragraph as a unit of expression. Reading is not made easier, but more difficult, when the reader must begin each paragraph with uncertainty whether the first words will continue the old thought or launch a new one—witness pages 54 and 55.

In form, the new edition is admirable—flexible leather binding, thin but strong paper, excellent type, with index (but not fully cross-indexed).

The publishers announce that the printing of 1916 with 100 pages on the federal income tax (the text used for this review) is now supplanted by a new printing without the sections on the income tax—but supplemented by a new edition, separately printed, on the latest interpretation of the income tax law.

WILLIAM MORSE COLE.

Harvard University.

Predetermination of Prices. By FREDERICK A. PARKHURST. (New York: John Wiley and Sons, Inc. 1916. Pp. viii, 96. \$1.25.)

A careful reading of this book suggests that it is fairer to judge it by the content than by the title. Measured by the latter it is disappointing. Considered, rather, from the point of view of what the author has done, it is an excellent book. The title as it appears on the outside of the book is "Predetermination of Prices"; inside it reads "The Predetermination of True Costs and Relatively True Selling Prices." One expects, therefore, an argument relating to these matters, and seizes upon the volume in anticipation of reading on a subject concerning which very little has been written. Realization of this is difficult for there is almost nothing on the predetermination of costs. Seven eighths of the book deals with costs; the remainder with profit and selling prices.

Referring now to the content, the book may be said to contain an exceptionally complete and well-presented exposition of the usual methods of ascertaining costs with the "flourishes" of scientific management. It is a good book to which to refer a clerk in a cost department for a working manual or a student of the subject of cost accounting. To such persons it offers not only the principles of cost finding but unusually clear and complete illustrations of their application.

That the author has presented the subject in the usual manner will be seen from the chapter headings which are as follows: I, Importance of Absolute Control of All Sources of Information; II, Discussion of Elements Affecting True Costs; III, Direct Costs; IV, Indirect Costs; V, Recapitulation of Costs; VI, Estimating; VII, Profit and Relatively True Selling Prices; VIII, Conclusion. There is nothing new about the first six chapters. The noteworthy thing about them is the thoroughness with which the illustrations showing the applications of the principles have been worked out. The chapter on Profit and Relatively True Selling

Prices discusses a number of bases upon which to determine prices such as the "productive hour," "pound," "piece," "per cent of cost," and "mutual satisfaction." The last mentioned is a sort of "what the traffic will bear" scheme summed up by the author as follows:

The purchase of such a machine enables the purchaser to turn out his product very much cheaper than he could otherwise do; and he is only too glad to buy at a price which allows the manufacturer of the machine a very large margin. Mutual satisfaction is undoubtedly the best term to use in describing this method of determining profit. After all, a satisfactory and fair price is one which both vendor and purchaser mutually agree upon in a transaction between two. If both are content there can be no logical argument against such a method.

The closure is an appeal for greater consideration and better treatment of the workman, not only because of philanthropic motives but because it pays. "In the future," says the author, "the successful business will begin its economy by eliminating wastes rather than cutting wages." "If the American business man, with his command of unlimited and unexcelled resources of practical thought, capital, equipment and energy, will govern his industrial world by 'true' figures and not guess work, his supremacy and that of the American workman will be impregnable."

JOHN RAYMOND WILDMAN.

New York University.

Principles of Accounting. By STEPHEN GILMAN. (Chicago: LaSalle Extension University. 1916. Pp. xii, 415. \$3.00.)

The student without accounting experience but attracted by the opportunities in the growing field of accountancy has often found the available treatises on the subject better suited for reference purposes than for helping him to master the working principles of accounting in a systematic manner. Many who have attempted to teach the subject have complained that most textbooks on modern accounting are written either by teachers with little practical experience in accounting or by practicing accountants without knowledge of pedagogy, the result in neither case being satisfactory. Doubtless both teachers and students will therefore welcome this new text on the principles of accounting, the author of which, a former manager of the credit department of the Tennessee Coal, Iron, and Railroad Company, brought to his task successful experience both in the teaching and in the practicing of accounting. "The purpose of the book," as he states, "is not to

promulgate the specialized treatment of any particular phase of the subject, but rather to present the basic principles of the science of accounting in a graphic and comprehensible manner."

In a "preliminary survey" the author, by means of a somewhat extended series of graphic illustrations of an ordinary pair of scales or balances, develops the law of double entry, or "the fundamental accounting equation" which he expresses as "assets = liabilities." This equation however, he later amends by classifying liabilities as: (1) liabilities to the proprietor; (2) liabilities to others. This amended equation constitutes the general ledger formula, the general ledger being explained as the keystone of the whole accounting system, really not a book or collection of leaves or cards, but rather a function, the practical application of the formula: $\text{assets} = \text{liabilities} + \text{proprietorship}$. The diagrams and their accompanying explanations showing the analogy of the law of physical balance to that of the balancing assets and liabilities in the ledger are effective, but it may be questioned whether so many rather obvious illustrations are necessary to establish the principle in a book which, according to the preface, was "written primarily for those having some training or experience in the art of bookkeeping." Probably to most of his readers the conclusion would have been equally clear had the writer begun with the assertion that double entry bookkeeping starts out with an equation, or balance, namely: $\text{assets} - \text{liabilities} = \text{proprietorship}$. For beginners, however, the pedagogic device of the pair of scales may have value.

In chapter 2, *The Bases of Accounting*, the student learns that the left-hand side of an account is for convenience called the "debit" side, and the right the "credit" side; that in the ledger we have "a device or mechanism by the aid of which the manager of a business may obtain a comprehensive view of the situation of the business as a whole, in which the activities of the business are reflected, and by which the history of the business is recorded"; that "the mechanics of operating this device is known as the art of bookkeeping"; and that "the act of adapting and regulating it and of interpreting its results is called the science of accountancy." This distinction reminds one of the old "Ray's Higher" definition of arithmetic as the science of numbers and the art of numerical computation. It leaves one in doubt, however, whether bookkeeping is or is not a branch of accounting. In the same chapter also we find a discussion of account relations, the rela-

tion of the proprietor to the business, the controlling account and subsidiary ledger, the distinction between real and nominal accounts, and the development of the classified trading accounts from the old-fashioned merchandise account. This is followed by a chapter on the development of the special journals, in which the various posting media are illustrated and the principles underlying their operation discussed, the modern journal being no longer a book but rather a function, exercised by a collection of books and sheets. The remaining chapters treat, in the order named, the balance sheet, assets and their valuation, liabilities, proprietorship, corporations, reserve and reserve funds, depreciation, special forms of statements, the holding company, and the consolidated balance sheet.

Holding that nowhere in the entire field of accounting has the constructive accountant a better opportunity to exhibit his skill than when classifying the nominal accounts, the author has devoted two whole chapters to proprietorship. This seems justified. But few problems arise in connection with the classification of assets and liability accounts, since they record only values owned or owed. But proprietorship accounts record business forces, and from them the manager may get information that will enable him to run his business to the best advantage. The discussion in the text is aided by excellent organization and classification charts and by model forms of statements. The author's conception of the business as a separate entity or individuality causes him to take the position that such items as wages, rent, and interest really represent assets of the business in the sense that they are accounts due from the proprietor, while items of profit, since the proprietor is entitled to them, are technically liabilities of the business to the proprietor. Carrying out this process of reasoning, with the author's primary classification of all accounts into nominal (proprietorship accounts) and real (assets and liabilities) would ultimately lead him to the interesting conclusion that the business has only one class of accounts—all assets; for liabilities, as he correctly states, are negative assets. This personifying of the business he holds is justified by experience as the desirable approach to the subject of accounting theory, and he maintains that proprietorship accounts reflect not a legal liability, but a theoretical liability. In this view he is in accord with many other writers on accounting theory: yet it is difficult to see why proprietorship accounts, simply because they normally have credit balances,

should be classed as liabilities, when it is perfectly clear that they are not liabilities. It seems better theory to reject this personification and consider the proprietorship accounts (representing the ownership or worth of the business) as a distinct group from the asset and liability accounts (representing the value owned), the fundamental relationship between the two groups being that of equality in value.

Not all authorities, either, will agree that organization expenses "are bona fide assets which need never be amortized or charged off, since they are perpetual in their nature, unless the life of the corporation is limited to a definite number of years, in which case they should be charged off during the life of the corporation." But the position that depreciation is a cost and not a deduction from profits seems well taken, as also the suggestion that "allowance for depreciation" is a better term, to represent the account credited with the value an asset has lost, than "reserve for depreciation," since a valuation account, which is an offset to an asset account, should be carefully distinguished from a reserve account, which is appropriated surplus. In discussing good-will the author suggests that its purchase is like the purchase of a bond at a premium. The bond premium represents future interest; the business premium or good-will represents future profits. As the life of the bond determines the yearly amount to be charged off, so in the case of good-will the number of years' profits which have been purchased determines the number of years over which good-will shall be charged off. But the charge should be against capital invested and not against current profits. However, he discusses other methods and adds that no one can afford to be dogmatic about the treatment of good-will since so many excellent authorities disagree absolutely.

On the whole, it may be said that the book does not undertake to advance new theories but to present clearly the principles underlying the best accounting practice. The point of view is modern, the treatment comprehensive and usually adequate, and the style simple and clear. Effective use is made of charts, examples, problems, and summaries. The author points out that accounting is not an exact science, that it involves many disputed points, and, recognizing that accounting instruction should be as broad as possible, he usually gives various views and methods, explains their relative advantages and disadvantages, and states his preference after deliberate consideration of the important factors pro and

con. The author's acquaintance with accounting theory, however, is evidently not equalled by his knowledge of economic theory, else why say: "In a natural state, water may be obtained without effort; hence it has no utility"?

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Cost Accounting and Burden Application. By CLINTON H. SCOVELL. (New York: D. Appleton and Company. 1916. Pp. xx, 297, 13. \$2.00.)

In his introduction the author states that the purpose of his book is "to examine the elements of cost, and to define principles and describe methods of procedure in the development of a cost accounting practice, particularly in respect to the determination of overhead charges or burden." He has kept to his text throughout and has made a very valuable addition to the literature on the subject.

The book naturally falls into six divisions: introduction (ch. 1), cost accounting (chs. 2-4), burden (chs. 5-13), budget system and statements (chs. 14-15), costs of specific industries (chs. 16-19), and summary (ch. 20 and appendix). Chapters 2, 3, and 4 contain practically all of the cost accounting except that which is concerned with burden and this part of the book may be considered with chapter 1 as introductory to the burden application which takes up the far greater part. In the introduction the author might have added to the clearness by making one assumption at a time and disposing of that before proceeding to another one. This, however, is not a very serious objection as it appears only in the introduction. That part dealing with burden application is well written and logically arranged.

The author is ever mindful that a cost accounting system for every business, and for different plants in the same business, must be modified to suit the particular business and plant. Therefore he does not attempt to lay down any fixed rules as to details, but has simply separated cost and burden into their elements and considered these elements in their relation to each other and to the business as a whole. This makes unnecessary the inclusion of a mass of forms, such as one usually finds in a book on cost accounting. The suggestions as to the methods of procedure will be found of much value to either cost accountant or manager, but they do not leave one with the impression that the suggested way is the only way.

Probably the most important thing in the whole book, certainly the one about which there has been least written, is what the author calls "unearned burden." It is the logical outcome of his attempt, as expressed elsewhere, of "determining the cost of doing something, doing something else or doing nothing." He means by that to analyze the burden in such a way that the part that is due to unused capacity for manufacturing may be kept separate from that due to used capacity, and, thereby, show more clearly the effect of varying volumes of business, and help in determining manufacturing and selling policies. The reasons and arguments advanced to support the theory are logical and convincing, but whether one agrees or not as to the desirability and necessity of so separating earned and unearned burden, a careful reading of the discussion will be well worth while to executives as well as cost accountants for the suggestions that it contains.

Another subject vitally connected with the unearned burden theory is that of interest charged to cost, which is discussed at some length. The author takes the stand that interest on the investment at a fair rate is a proper charge to manufacturing costs. He gives a number of good reasons, from the standpoint of the cost accountants and managers, why such a charge should be included in manufacturing cost, and then he meets the objections raised against it. In the appendix is included the expressions of the best authorities on economic theories on the subject both for and against. The defense of the principle is well executed, and if one accepts the principle of separating earned from unearned burden, a charge of interest on investment against manufacturing costs must follow as a natural result.

That section of the book which deals with specific industries does not add very materially to the value of the book as a whole. Lack of space has made it necessary to treat each industry in a very hasty way, with the result that a great many of the problems to be solved are not even mentioned. Its chief usefulness lies in the fact that it repeats and emphasizes the principles laid down in the first part, and suggests how those principles may be applied to various specific industries.

The last chapter, which deals with the relation of the cost department to the factory organizations, emphasizes the need for a closer relation between the general accounting and the cost department. This is a point that cannot receive too great emphasis. If these two organizations are allowed to work independently of

each other the result will be that the management will be likely to receive two conflicting reports, and instead of their checking each other they will serve merely to confuse.

The work is a valuable contribution to the literature on the subject of cost accounting, and comes at a very opportune time, when managers everywhere are giving more thought than ever before to obtaining accurate and reliable cost data. It is to be recommended to managers, accountants, and students of cost accounting, chiefly for the fundamental principles discussed, and the very great number of suggestions offered.

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Newport News, Virginia.

Retail Selling. A Guide to the Best Modern Practice. By JAMES W. FISK. (New York: Harper and Brothers. 1916. Pp. 335. \$1.00.)

The Science and Art of Salesmanship. By SIMON ROBERT HOOVER. (New York: The Macmillan Company. 1916. Pp. xviii, 193. 75 cents.)

Fundamentals of Salesmanship. By NORRIS A. BRISCO. (New York: D. Appleton and Company. 1916. Pp. xiv, 322. \$1.50.)

Mercantile and producing concerns are increasingly adopting pedagogical methods in building up the business efficiency of their employees, and our educational institutions are providing more facilities for vocational training. The sales end of a business is the most important end: the size of the market dictates the scale and manner of production; the policy of the house is directed to getting and maintaining customers' good-will; "the richest rewards of business are in salesmanship rather than in the office end." It is, however, the end which until recently has received least attention; the present interest is proved by the fact that three of our largest publishing houses in 1916 brought out the above texts.

These three texts have a representative authorship. Mr. Fisk is director of the selling service of a distinguished New York store and was formerly director of courses in retail selling and advertising in *Dry-Goods Economist's* training school. Mr. Hoover is assistant principal of the High School of Commerce of Cleveland and his book is "the result of a process of development extending through several years of class instruction and close association

with a number of large business organizations." Professor Brisco is head of the department of political economy and sociology at the School of Commerce, State University of Iowa. They represent, therefore, (1) the views of a man experienced in retail salesmanship and in teaching it in a corporation school and by mail, one who has had a leading part in instituting and spreading the pedagogy of sales; (2) the views of a man in one of our best-known public commercial high schools, who speaks from the standpoint of teacher and theorist and also from that of observer in commercial houses; and (3) the views of a dean of the commercial school of a prominent university.

The texts have many elements of similarity, but it seems better to point out their dissimilarities and characteristic features. The Fisk text is divided into four parts: I, Marketing Methods—a good analysis of the selling field, retail competition, store sales policies, store organization, store and stock arrangement, display and advertising; II, Personal Salesmanship—being a presentation of the qualifications of the salesman, his knowledge of the store and merchandise, the typical customers and how to meet and treat them, and the successive stages of a good sale; III, Training People to Sell More Goods—which states the purposes in view, the proper methods of teaching, and the use of the various incentives for selling efficiency; IV, Supervision of the Selling Force. The treatment is precise and to the point; it sticks strictly to retail selling; and is written primarily from the point of view of the store manager or proprietor—only about ten pages in the second part are put in the second person and addressed to the salesmen directly by way of counsel. It will undoubtedly prove an excellent guide to store managers and be serviceable in junior courses of store instruction. It is quite complete with the exception that it offers no treatment of retail advertising.

The Hoover text is designed for class-room use and is based on the assumption of close similarities of salesmanship "when practiced in the small retail business, in canvassing, in a department store, or by a commercial traveling man." In the reviewer's opinion this assumption, while correct as a matter of fact, destroys to a large degree its serviceableness as a textbook for either beginners or juniors; it has resulted in a loosely built text, the author hopping about with quite unlimited and unwarranted freedom between store, canvasser, and drummer. To a beginner it will prove confusing and indefinite, to an advanced student much

will be too commonplace. Some of the chapters are compilations of heterogeneous data rather than orderly treatments.

Professor Brisco has divided his text into two parts: I, The Salesperson and Efficient Salesmanship; II, The Manager and Efficient Salesmanship. The consideration of the third person concerned, namely, the consumer, is put into part I by way of information to the salesperson as to how he may analyze his customer through appearance, voice, acts, etc. The steps in an orderly sale, the objections commonly raised and answered, the use of suggestion, are also given in this part. But to devote 110 of the 230 pages to the salesman's health, appearance, character, tact, personality, enthusiasm, honesty, courtesy, confidence, loyalty, etc., seems an unduly prolix treatment of common virtues which are proper and becoming to any one whether salesman, hod-carrier or bank president. Two chapters of the second part, on Habits and Fatigue, partake of the same nature. This text is dominated by the *retail*-selling point of view although it rarely states directly this position. It is designed as a textbook, each chapter being followed by a list of questions on the data and by a bibliography.

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NEW BOOKS

- BAMBURGH, W. C. *Talks on business correspondence*. (Boston: Little, Brown. 1916. Pp. xv, 246. \$1.)
- BROWN, B. S. *Modern fruit marketing; a complete treatise covering harvesting, packing, storing, transporting, and selling of fruit*. (New York: Judd. 1916. Pp. 283. \$1.25.)
- BROWNE, T. A. *The Torrens land transfer act of Nebraska*. (Lincoln: Legislative Reference Bureau. 1916. Pp. 60.)
- CHILDS, F. H. *A treatise on American business law, with illustrative cases*. Vol. 1, *Elementary law. Contracts*. (Chicago: Walton School of Comm. 1916. Pp. 351.)
- CLOOS, G. M. and FARMER, H. J. *Manual for appraising real estate and buildings by approved practical methods; with key to land values as shown on Caspar's official map of Milwaukee and suburbs*. (Milwaukee: C. N. Caspar Co. 1916. Pp. 59. \$15.)
- COHEN, J. H. *The law; business or profession?* (New York: Banks Law Pub. Co. 1916. Pp. 415. \$2.50.)
- COMBAT, F. J. *Manuel des opérations de bourse*. New edition. (Paris: Berger-Levrault. 1916. 6 fr.)

- DENCH, E. A. *Advertising by motion pictures*. (Cincinnati: Standard Pub. Co. 1916. Pp. 255. \$1.50.)
- DENHAM, R. S. *The science of cost-finding. Applied to factories making products to special or shop orders*. (Cleveland, O.: Cost-finding Co. 1916. Pp. 104.)
- DUFF, A. M. *Manufacturers hourly basis wage calculator for pay rolls and labor costs; shows the amount for every quarter hour from one quarter hour up to 144 hours, calculated for each half cent of wages from 8 cents per hour up to and including 80 per hour; 145 schedules*. (Boston: A. M. Duff. 1916. Pp. 157.)
- DUNLAP, G. S. *Philadelphia investors 1916*. (Philadelphia: Dunlap Prtg. Co. 1916. Pp. 117. \$10.)
- GIBSON, T. *The pitfalls of speculation*. 1916 edition. (New York: Moody Mag. & Bk. Co. 1916. Pp. 184. \$1.)
- HALE, S. R. *Short talks on retail selling*. (New York: Funk & Wagnalls. 1916. Pp. 170.)
- HAWORTH, S. G. *Cotton seed oil mill bookkeeping, illustrating the use of the voucher system*. (Battle Creek, Mich.: Ellis Pub. Co. 1916. Pp. 55. \$.65.)
- JACKSON, F. DEF. *The Jackson system of mercantile reporting; practical and tested rules on the best and quickest way to establish a mercantile credit reporting agency*. (Columbus, O.: Speers-Simpson Co. 1916. Pp. 92. 35c.)
- JONES, E. D. *The administration of industrial enterprises. With special reference to factory practice*. (New York: Longmans. 1916. Pp. vi, 442.)
To be reviewed.
- KLEIN, R. *Quick calculator: currency reductions*. (New York: Dutton. 1916. Pp. 13. 80c.)
The text is in English, French, and Russian; the tables show reductions from any one into any other system of weight, measure, or coinage.
- LEICHTER, E. *Successful selling. A treatise covering essentials of selling efficiency*. (New York: Funk & Wagnalls. 1915. Pp. 78.)
- SEABROOK, E. L. *How to make the business pay; a practical treatise on business management for contractors in sheet metal work, plumbing, heating, electrical work and building construction; with methods for ascertaining the cost of conducting collections and credits, publicity and business correspondence, securing and retaining custom*. (New York: Sheet Metal Pub. 1916. Pp. 173. \$2.)
- SHAW, A. W. *An approach to business problems*. (Cambridge: Harvard Univ. Press. 1916. Pp. xxvi. 332. \$2.)
- TARBELL, I. M. *New ideals in business. An account of their practice*

and their effects upon men and profits. (New York: Macmillan. 1916. Pp. 339. \$1.75.)

THOMPSON, C. B. *How to find factory costs.* (Chicago: A. W. Shaw. 1916. Pp. 191, charts. \$3.)

THRIFT, T. B. and others. *Business letters, how to write them.* (Jackson, Mich.: Business Eng. Pub. Co. 1916. Pp. 125. 85c.)

WEBNER, F. E. *Factory accounting.* (Chicago: La Salle Extens. Univ. 1916. Pp. 300. \$3.30.)

WIGENT, W. D. and others. *Modern filing; a text book on the office system.* (Rochester, N. Y.: Yawman & Erbe Mfg. Co. 1916. Pp. 100. \$1.)

ZIMMER, G. F. *The mechanical handling and storing of materials.* (New York: Van Nostrand. 1916. Pp. 744.)

Classified C. P. A. problems and solutions—1915. (New York: Ronald Press. 1916. Pp. 350. \$3.)

Based on the 1915 examinations of twenty states, there are 224 questions, classified according to 117 subjects which fall under theory of accounting, practical accounting, and auditing (not commercial law). The answers have been supplied by Henry C. Cox, Hazen P. Philbrick, Paul J. Esquerre, John H. Schnackenberg, D. C. Eggleston, Arthur B. Sinclair, Earl A. Saliers, and others. A special glossary includes about 100 other questions from the examinations which involve accounting terminology.

The land-title registration act of the state of New York. Second edition. (Albany, N. Y.: Bender. 1916. Pp. 87.)

Mental ability. Course in business essentials, vol. 3. (New York: Business Training Corporation. 1916. Pp. 141.)

Federal bill of lading act (Pomerene act) making negotiable bills of lading in interstate and foreign commerce; effective Jan. 1, 1917. (Boston: Merchants National Bank. 1916. Pp. 36.)

Harvard system of accounts for shoe wholesalers. Explanation of the profit and loss statement. Bulletin no. 6, Bureau of Business Research. (Cambridge: Harvard Univ. Press. 1916. Pp. 41. 50c.)

Harvard system of stock keeping for shoe retailers. Bulletin no. 7, Bureau of Business Research. (Cambridge: Harvard Univ. Press. 1916. Pp. 37. 50c.)

Harvard system of operating accounts for wholesale grocers. Explanation of the profit and loss statement. Bulletin no. 8, Bureau of Business Research. (Cambridge: Harvard Univ. Press. 1916. Pp. 43. 50c.)

The one hundred best investments. (London: British Foreign Colonial Corporation. 1916. Pp. 103. 1s.)

Status of bonds under the federal income tax. (New York: Standard Statistics Co. 1917. Pp. 158. \$2.)

Synopsis of the laws of the Dominion of Canada respecting the sale of food and other commodities. (Ottawa: Dept. of Trade & Comm. 1916. Pp. 16.)

Capital and Capitalistic Organization

The Telephone and Telephone Exchanges. Their Invention and Development. By J. E. KINGSBURY. (New York: Longmans, Green and Company. 1915. Pp. x, 558. \$4.00.)

Any one interested in the development of a public utility which has become in this country one of the most important servants of society and of commerce, will find this book significant and of value. It is intended by its author to comprise a short history of the telephone industry, and it is in fact an abbreviated or condensed history of the development of invention in the art of the telephone.

The book opens with interesting chapters describing the state of science anterior to the invention of the telephone by Alexander Graham Bell, and these are followed by chapters relating to the scientific characteristics of spoken language and to the development of Mr. Bell's ideas which eventuated in the telephone itself. All of this matter is interesting to one who would study the history of the development of this great, revolutionary invention, which has had a tremendous influence upon society. These eight chapters are all compressed in 76 pages, and therefore are perhaps too condensed to show the full romance of the early telephone work.

In opening the ninth chapter, the author says, "To the present generation familiarity in the use of the telephone has dulled the sentiment of wonder once existing that speech should be transmitted or that means should be found for diverting that speech from line to line at the speaker's desire. So promptly was science applied to commercial and social uses; so generally, after a time, was the application taken advantage of, that the wonder has evaporated and the user only become the more exacting in his requirements." Then follow a number of chapters comprising some hundred pages, dealing with the physical construction of the modern apparatus, including the exchange switchboards and associated apparatus, the transmitters and receivers, the call bells and other auxiliary devices, and the manner of their development and association into the modern complex commercial telephone system.

The book may be analyzed into sub-divisions comprising: The history of the growth of the idea of Bell and its introduction into commercial use; the development of the telephone exchange, with all its details; organization of the telephone industry in the United States, presented by the author in a most interesting manner; the development of great exchanges, with the so-called multiple switchboard, and utilizing underground cables in the larger cities; the engineering problems and difficulties which had to be met and overcome in making telephoning in great cities a success, which included the development of satisfactory underground cables, the putting of telephone engineering on a scientific and rational basis, the changing from the so-called series arrangement of devices to the branching or "bridging" system (a change apparently small in itself, but of far-reaching influence), the introduction of the common battery system in the form of a storage battery at the central office in substitution of the primary cells which had theretofore been used in each of the customer's appliances, and the development of automatic service; the development of long distance service and the modifications which this has imposed on the character of the instruments to be used in telephony; the prices of telephone service and the extent of the service in the different parts of the world.

The text is followed by appendices, showing telephone statistics of the world. Appendix B emphasizes the fact that the British government found it necessary in 1915 to increase the prices charged by the government telephone department.

The telephone statistics given in the appendices are now three years old, being dated January 1, 1914, but the relative importance of the telephone in the different countries still is similar to that given in this book. Of the nearly 15,000,000 telephones in the world on January 1, 1914, over 9,500,000 were in the United States. Of the nearly 5,500,000 outside of the United States, over 4,000,000 were in government systems, and in no country solely dependent on a government system has the telephone received such a tremendous development as in the United States. That this is due to the fact that our telephones are wholly in the hands of private companies who have exercised a superior degree of initiative and resourcefulness for the sake of enlarging the business to its fullest possibilities may be denied by some people, but it is not open to argument that nearly 65 per cent of the total world telephones are operated by private companies of the

United States, and that the United States is the only country in which there is such a widespread use of telephones that the people are using nearly 10 telephones for each 100 persons in population. No other country, with the exception of Canada—in which again most of the telephones are operated by private companies—exceeds one half of the number of telephones per 100 capita which is characteristic of the United States. In the European countries, the relation of the telegraph to the telephone may have something to do with this difference, but this can only account for the lesser part of the difference. In the Netherlands, with their tremendous density of population of nearly 500 people to the square mile, there are less than $1\frac{1}{2}$ telephones per 100 of population. Norway and Sweden, notable among European states for their telephone density, have only 4 telephones per 100 of population, although a good part of the telephones of those countries are in government systems, and are supposed to be operated more economically than privately owned telephones in the United States.

These statistics also show that there is but one city in the world outside of the United States which has as large a telephone development in proportion to its population as the average for the 33 cities in the United States with over 200,000 population, and also the fact that the rural districts of no other country except the United States have come to use telephones so extensively that the rural telephones per capita of the rural population are nearly equal to the telephones per capita in the cities.

In the fiscal year 1913, according to these statistics, the receipts per telephone in the United States averaged \$33, while they averaged \$34 for the total of the world. The average for European countries, where an overwhelming proportion of the telephones are government owned (3,500,000 being government owned, to about 500,000 privately owned), the average receipts per telephone were \$35, ranging from \$21.20 for the government telephones of Luxemburg to \$50 for both private and government owned (about half and half) in Spain.

To those who believe that the telephone service of the United States is over expensive to the average user, a study of the statistics in this book is likely to be illuminating, provided reliance for conclusions may be placed on comparisons between the statistics of privately owned and government owned systems. The impartial student of these statistics may arrive at the conclusion that the telephone prices in the United States are not likely to be

solved by large average reductions, whether the service remains in the hands of private companies or goes into the hands of the government, but can only be solved by considering the cost of the service to the different classes of users, so that users shall pay more directly in proportion to what they actually obtain from the telephone company in the way of messages. This may call upon the larger users to pay more, but users of small and medium needs may then pay less.

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NEW BOOKS

BURNETT, D. F. *Cases on the law of private corporations, selected and supplemented with notes.* (Boston: Little, Brown. 1916. Pp. 140.)

MAYOR, J. *Government telephones. The experience of Manitoba, Canada.* (New York: Moffat, Yard. 1916. Pp. viii, 176. \$1.)

WORMSER, I. M. *Illustrative cases on corporations. A companion book to Clark on corporations, third edition.* (St. Paul: West Pub. Co. 1916. Pp. x, 451. \$2.50.)

I. *Opposing government ownership and operation of public utilities.*
II. *Advocating exclusive regulation of all railroads by the federal government.* (New York: Merchants' Association of New York. 1916. Pp. 55.)

The federal antitrust laws with amendments. (Washington: Dept. of Justice. 1916. Pp. 105.)

Labor and Labor Organizations

The Boot and Shoe Industry in Massachusetts as a Vocation for Women. By the DEPARTMENT OF RESEARCH OF THE WOMEN'S EDUCATIONAL AND INDUSTRIAL UNION (Boston). Studies in Economic Relations of Women, Vol. VI. Bulletin of the United States Bureau of Labor Statistics, Whole No. 180; Women in Industry Series, No. 7. (Washington: United States Department of Labor. 1915. Pp. 109. 80 cents.)

Millinery as a Trade for Women. By LORINDA PERRY. Prepared under the direction of SUSAN M. KINGSBURY and MARIAN PARRIS SMITH. Studies in Economic Relations of Women, Vol. V. (New York: Longmans, Green and Company. 1916. Pp. xi, 134. \$1.50.)

The series of Studies in Economic Relations of Women of

which the two books under review are a part have a human interest generally lacking in statistical surveys of industries. Social and individual welfare as affected by conditions of labor is the keynote of the inquiry. But to my mind the most valuable contribution which these volumes make to this economic problem is the discussion of wage schedules involving as it does a detailed study of seasonal fluctuations of employment in trades that are dominated by the whim of fashion.

Standards of living depend most intimately upon wages received. In an earlier investigation of wages of women workers, it was estimated that a minimum wage of \$9 per week was necessary to insure a decent standard of living for women in Boston. If we bear this in mind the statistics presented in these studies become most significant.

Ranking next to textiles in the number of women employed, the boot and shoe industry "represents the high-water mark of earnings for factory women." The study of wage returns in this industry is therefore particularly instructive. Seasonal fluctuations debar many workers from steady employment; from 9,000 to 10,000 drop out of the industry entirely at dull seasons. This fluctuation varies essentially with the system of manufacture. Factories using the "stock system" where the product is little affected by styles show least variation, while those using the "order system," especially large factories making high-grade goods, show most extreme seasons. The busy seasons also vary for different localities and even for different factories in the same locality with an inevitable tendency to induce a restless shifting about, especially among the younger workers, in an unsuccessful attempt to keep employed. The wages of this class, therefore, can be considered only as supplementary. For purposes of study and analysis, interest naturally centers in the earnings of "steady workers," those who work at least 48 weeks, most of them indeed work 50 and 51 weeks, for here we really gauge what women workers may earn in this industry. An important fact at once made evident in the statistical tables is "the surprising fluctuation of weekly wages" even in seasons of active production. This is illustrated in two tables (22, 23) which show the weekly wages of four hand workers and three machine workers for a period of three months. Variations ranging from \$1 to \$9 in these schedules make it evident how seldom a worker actually receives what is easily her "potential wage." Again, two tables (32, 33) show

time lost by twenty-six time workers and seventeen skilled machine workers on piece work with the consequent serious deductions from annual earnings. This time lost is shown to be seldom due to voluntary absences and must be ascribed to what is termed "factory unemployment," that is, irregularity in the amount of work given out. The net result of these factors is shown in the annual earnings of 1,313 workers, of whom 513 received \$500 or more; 800 received \$500 or less; and 670 of these received \$450 or less. That is, nearly half of these skilled steady workers received less than \$9 a week in a factory industry that is admittedly one in which women are paid the best wages.

Millinery is an attractive trade to women. Its artistic appeal, the social status accorded its workers, and the incentive of high wages obtainable at the top make it a popular choice of young girls. It has, however, many drawbacks from the point of view of the woman who needs an occupation for self-support. With the exception of "trimmers," a comparatively small group of skilled and artistic workers who receive high wages, the statistics presented in this study show that the rank and file of "makers," comprising fully three quarters of those in the trade, at best receive nominal weekly wages of \$8 to \$9, which in the majority of cases average less than \$5 a week for the year. Millinery is indeed a good example of "a parasitic trade," "a trade employing partially subsidized woman's labor," the worker being in part dependent upon the family group.

Seasonal employment reaches its greatest exaggeration in millinery. The busy season means "rush work," the taking on of a large force of temporary helpers, serious physical and nervous strain for employees and over-time work. The dull season brings the problem of unemployment which has not yet been satisfactorily solved by any "scheme of dovetailing several trades." The swing of fashion together with "a chronic over-supply of labor" exert the strongest influence in bringing about present conditions in this "absolutely unorganized and unregulated trade." It is therefore suggested that correctional influences would be organization of employers to solve the seasonal problems and to modify the vagaries of fashion, organization of employees for self-protection and to raise their own industrial standards, and a campaign of education among consumers to make them more intelligent and considerate in demands. As far as possible, also, young workers should be warned against the trade; "only those of ex-

ceptional skill, persistency, or economic resources should be permitted to enter."

We are here confronted by the cold fact that even in the ranks of skilled labor, it is but a small minority of women who can be considered to be properly self-supporting. We certainly should not regret that for a large class of women employment is only a means of supplementing a fairly adequate family income. The presence of these workers in the industrial field does, however, seriously complicate the problem of self-support for less fortunately situated women.

Such studies as these not only bring this problem squarely to the front but also contribute much valuable material towards its solution. Those who are interested in problems of minimum wage legislation, vocational guidance and instruction for the trades will find a fund of reliable information in these volumes.

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Collective Agreements in the Men's Clothing Industry. By CHARLES H. WINSLOW. Bulletin of the United States Bureau of Labor Statistics, Whole No. 198; Conciliation and Arbitration Series, No. 7. (Washington: Government Printing Office. 1916. Pp. 186.)

The present volume represents the seventh report in the series issued by the United States Bureau of Labor Statistics under the subject of Conciliation and Arbitration. The report is divided into two parts, the first dealing with agreements between Hart, Schaffner and Marx and their employees, and the second with agreements between the unions and associations of manufacturers. The first of these is much more satisfactory than the second, which does little more than to present the provisions embodied in the various agreements.

The machinery for collective bargaining and mediation in the Hart, Schaffner and Marx establishment has been developed gradually as the result of the serious strike during the latter part of 1910. In January, 1911, an agreement was negotiated between the workmen and their employers which provided for a board of arbitration, one member to be selected by the employers, one by the employees, and a third by the two previously chosen. This board, for which it was found impossible to get a third member, was to adjust the existing difficulty and to fix a method for settling grievances which might arise in the future.

As the result of the efforts of the board, the strike was settled and a working agreement was adopted which was to remain in force for two years. The arbitration board was continued so as to provide a final court to which grievances of the workmen might be referred. Relief was to be sought first at the hands of the labor complaint department which was created by the company to hear and remedy grievances. However, this plan did not work satisfactorily because appeals were made too frequently to the board of arbitration and the settlement of many of the controversies required a technical knowledge of the industry which neither of the members of the board possessed. A trade board was accordingly created to which all grievances are immediately referred. This board consists of five practical men in the trade, two appointed by the employers and two by the employees, the chairman being appointed by the committee which organized the trade board. Each side appoints a deputy.

When a complaint arises the two deputies immediately endeavor to bring about a settlement. If they fail the grievance comes before the trade board. Failing of adjustment here, the grievance is then brought before the board of arbitration for final action. The activity of the trade board has smoothed out many differences between the firm and the workers, and has relieved the board of arbitration of a great deal of its work. The cases considered and disposed of under the agreement have included claims of wrongful discharge, adjustment of work and prices, demand for the reduction of the number of employees, the preferring of non-union help, and the ill treatment of employees. Of the cases disposed of by the trade board, 27.4 per cent were compromised, 27.4 per cent were decided in favor of the employees, and 24.2 per cent in favor of the company.

The status of the unions in the industry has been improved by preferential treatment in the matter of hiring, laying off and discharging of employees. This preferential treatment has naturally resulted in a rapid growth in union membership, so that in 1914 between 80 and 90 per cent of the employees of Hart, Schaffner and Marx were members of the union. The agreements between this firm and their employees have been in force with renewals since 1911, and that they have been highly successful in maintaining satisfactory relations between the firm and its workmen is attested by both sides.

Besides the agreement between the firm of Hart, Schaffner and

Marx and its employees, Mr. Winslow finds collective agreements between ten associations of employers and their workmen. Of these, seven provide some method of mediation, and nine provide machinery for arbitration. Six have provision for a union shop, and two others for a preferential union shop. These various agreements are all published here in detail.

The attainment of success in collective bargaining in the clothing trades Mr. Winslow properly considers a noteworthy achievement because the conditions prevailing in the industry would seem to render any collective action impossible. The workers were not only aliens but came from a number of distinct races, having frequently not even a common language. They were unskilled, uneducated, lacking in material resources, constantly submerged under new waves of immigration, and very poorly paid. Yet they have succeeded in some cases in establishing what amounts practically to a closed shop, have developed a militant and effective union, and have shown themselves to be intelligent and capable of self-government. If collective bargaining succeeds so well under conditions which look so unpromising there is surely reason to suppose that it could be introduced with satisfactory results into industries where conditions are more favorable.

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NEW BOOKS

- COLLIE, J. *Articles on industrial accidents and occupational diseases, including suggestions to attending doctors, medical examiners, and claim adjusters.* (London: Employers' Liability Assurance Corporation, Ltd. 1916. Pp. 66.)
- GREENWOOD, J. H. *A handbook of industrial law.* (London: Univ. of London Press. 1916. Pp. 288.)
- KENT, A. F. S. *Second interim report on an investigation of industrial fatigue by physiological methods.* Cd. 8335. (London: Wyman. 1916. 1s. 6d.)
- MACLEAN, A. M. *Wage-earning women.* (New York: Macmillan. 1916. Pp. 180. 50c.)
- MEYER, H. H. B. *List of references on child labor.* Industrial series no. 3. Bureau publication no. 18. (Washington: Children's Bureau. 1916. Pp. 161.)
- O'HARA, E. V. *A living wage by legislation: the Oregon experience.* (Salem, Oregon: Industrial Welfare Commission. 1916. Pp. xxiii, 57.)

- RICHEY, H. *Richey's federal employers' liability, safety appliance, and hours of service acts.* Second edition. (Charlottesville, Va.: Michie Co. 1916. Pp. 795. \$6.50.)
- SUGAR, M. *Working class justice; a popular treatise on the law of injunctions in labor disputes.* (Detroit, Mich.: Detroit Federation of Labor. 1916. Pp. 40. 5c.)
- WILLIAMS, J. E. and others. *The Hart Schaffner & Marx labor agreement.* (Chicago: Hart Schaffner & Marx. 1916.)
- WILLITS, J. H. *Steadying employment, with a section devoted to some facts on unemployment in Philadelphia.* (Philadelphia: Am. Acad. Pol. & Soc. Sci. 1916. Pp. 104.)
- Annual reports of national officers of the American Flint Glass Workers' Union.* (Toledo, O.: Kraus & Schreiber. 1916. Pp. 107.)
- International labor forum.* (New York: Latin-American News Association. 1916. 10c.)
- The labor law and the industrial code. With amendments, additions, and annotations to July 1, 1916.* Printed in advance from the annual report of the Department of Labor for 1916. (Albany: Bureau of Statistics and Information. 1916. Pp. 258.)
- Macdonald directory of labor organizations, Chicago and vicinity.* (Chicago, 154 West Randolph St. 1916. Pp. 64. \$5.)
- Ninth report of the registrar of boards of conciliation and investigation of proceedings under the industrial disputes investigation act, 1907 for the fiscal year ending March 31, 1916.* (Ottawa. 1916. Pp. 204.)
- Proceedings of the fortieth convention of the American Flint Glass Workers' Union held at Tiffin, O., July, 1916.* (Toledo, O.: Kraus & Schreiber. 1916. Pp. 284.)
- Report of the health of munition workers committee.* Memorandum no. 13, *Juvenile employment.* (London: Wyman. 1916. Pp. 8.)
- Report of proceedings at the forty-eighth annual trades union congress at Birmingham, September 1916.* (London: Wyman. 1916. 1s.)
- Rapport au nom de la commission mixte du travail et du chômage, relativement aux mesures à prendre pour procéder à l'organisation du travail au moment de la démobilisation, présenté par Henri Sellier et Emile Deslandres.* (Paris: Conseil Générale de la Seine. 1916. Pp. 59.)

Money, Prices, Credit, and Banking

NEW BOOKS

- BOSS, W. L. *The Boss plan for making the bank check good for its face value of 100 cents on the dollar throughout the United States.* (New York: Appeal Prtg. Co. 1916. Pp. 19. 50c.)

- CURETON, C. M. and HARRIS, W. M. *Banking laws of Texas, with annotations, forms, opinions of the attorney general.* (Austin: Southern Law Bk. Pub. 1916. Pp. 875. \$7.50.)
- DICKSON, T. H. and MAYES, E. *Banking and commercial statutes of Mississippi, from the code of 1906 and the legislative acts of 1908, 1910, 1912, 1914, and 1916.* (Chicago: Rogers & Hall Co. 1916. Pp. 178. \$3.)
- EATON, J. N. *Commercial paper: its history and development and the probable effect of the federal reserve act.* (New York: Bankers Pub. Co. 1916.)
- FOOTE, A. R. *The injustice of the federal farm loan law.* (Columbus, O.: Am. Progress Pub. Co. 1916. Pp. 26. 25c.)
- GUEVARA, L. *Towards reorganization of international finance.* (London: Simpkin, Marshall, Hamilton, Kent & Co. 1916. 3s. 6d.)
- HAM, A. H. *The object of the credit union. A reply to Myron T. Herrick.* Reprinted from the *New York Sunday Times.* (New York: Russell Sage Foundation. 1916. Pp. 10.)
- HAM, A. H. *People's bank. Address delivered before the National Conference of Charities and Corrections, Indianapolis, Ind., May 15, 1916.* (New York: Russell Sage Foundation. 1916. Pp. 13.)
- KEMMERER, E. W. *Modern currency reforms. A history and discussion of recent currency reforms in India, Porto Rico, Philippine Islands, Straits Settlements and Mexico.* (New York: Macmillan. 1916. Pp. xxi, 564. \$2.40.)
To be reviewed.
- KNIFFIN, W. H., JR. *The practical work of a bank.* Second edition. (New York: Bankers Pub. Co. 1916. Pp. 650. \$5.)
- MACDONALD, G. *The evolution of coinage.* (New York: Putnams. 1916.)
- PATTERSON, E. L. S. *Notes on foreign exchange and a glossary of financial terms.* (Toronto: Shaw Corres. School. 1916. Pp. 236.)
To be reviewed.
- PERINE, E. T. B. *The story of the trust companies.* (New York: Putnams. 1916. Pp. xvii, 327. \$1.50.)
- PRATO, G. *Problemi monetari e bancari nei secoli XVII. e XVIII.* (Torino: Soc. Tip. Ed. Nazionale. 1916. Pp. 315.)
- THRALLS, J. *The clearing house.* (New York: Am. Bankers Assoc. 1916. Pp. x, 79. \$1.)
- WHEELER, D. B. *A new system of banking and credit, established by pooling small bank balances in a single joint account.* (Washington: Hayworth Pub. House. 1916.)
- Banks and banking.* (New York: Am. Inst. Banking. 1916. Pp. 304. \$2.)

Among the contributors are H. Parker Willis, C. W. Allendoerfer, Harold J. Dreher, Jerome Thralls, and George E. Allen.

Bulletin of the National Federation of Remedial Loan Associations, November, 1916. Proceedings of the eighth annual convention, Detroit, Mich., June 22-24, 1916. (George E. Upson, 107 Paul Bldg., Utica, N. Y. Pp. xiii, 51.)

The following papers are here reprinted: "The year's progress," by A. H. Ham; "Conditions in Ohio under the law of 1915," by Arthur D. Baldwin; "Advertising," by George E. Upson; "The Morris plan," discussion; "Recording mortgages," by F. E. Stroup; "Standards of salaries," by A. L. Whitmer; and "The future of the remedial loan movement and the outlook for national federation," by Hugh Cavanaugh. A table shows the work of the remedial loan societies for 1915-1916.

Departmental committee on prices. Interim report on meat, milk, and bacon. Cd. 8358. (London: Wyman. 1916. 2s. 6d.)

The federal estate tax law and regulations (inheritance tax). (New York: Guaranty Trust Co. 1916. Pp. 35.)

The federal farm loan act. With marginal notes and index. Sen. Doc. No. 500, 64 Cong., 1 Sess. Prepared by the Joint Committee on Rural Credits. (St. Louis: Am. Nat. Bank of St. Louis. 1916. Pp. 49.)

Trust companies of the United States, 1916. (New York: U. S. Mortgage & Trust Co. 1916. Pp. 1x, 519.)

This is the fourteenth edition. The statistics of 1932 companies are given and there is a digest of state legislation relating to trust companies, with the reserves which they are required by law to keep. The volume is handsomely printed and maintains the standard set by previous issues.

What it costs to run a bank; a report by the Bureau of Business Standards of the A. W. Shaw Company. (Chicago: A. W. Shaw. 1916. \$2.)

Public Finance, Taxation, and Tariff

The Colonial Tariff Policy of France. By ARTHUR GIRAULT. Edited by CHARLES GIDE. Carnegie Endowment for International Peace, Division of Economics and History. (Oxford: At the Clarendon Press. 1916. Pp. 305. \$2.50.)

This is one of the two initial publications issued by the Division of Economics and History of the Carnegie Endowment for International Peace; the other being Grunzel's *Economic Protectionism*. Professor J. B. Clark, the director of the division, has introduced the series with a preface which is identical for the two volumes. Professor Girault's book is said on the title-page to be

edited by Professor Charles Gide: there is, however, nothing in the way of explanation or comment from the editor. Presumably he has been responsible only for the selection of author and topic.

The book gives a narrative and critical account of the colonial policy of France. A first part, comprising about half the contents, gives a historical sketch of that policy. The second and concluding part takes up the present colonies one by one—the Small Colonies, Indo-China, Madagascar and dependencies, West Africa, Equatorial Africa, Algeria, Tunis, and Morocco—and describes and discusses their present relations with the mother country. In style and arrangement it is a typical and creditable example of French scholarly work. It is fluently and clearly written, well arranged, supplied with convenient introductions and summaries; and there is a good index. The passages that involve criticism and reasoning are sensible, but cannot be said to show a thorough grasp of general economic theory or of the principles of international trade.

The most interesting period in the long story is that of the last generation: that is, since the culmination of the protectionist reaction in France in the tariff act of 1892. Then was adopted for the main colonies the general policy of "tariff assimilation." By this term is meant that the main colonies (by no means all) are treated as an integral part of French tariff territory. French goods are admitted free into the colonies, and colonial goods are admitted (in the main) free into France. Foreign goods pay the same duties on importation either into the colonies or into France; hence colonial and French producers have alike the protection of the French tariff. The system obviously cuts two ways, and even from the protectionist point of view is by no means without disadvantage to the mother country. The French producers find themselves exposed to the free competition of colonial producers. More important, the colonial producers of such commodities as sugar, coffee, and cocoa gain in France the benefit of the French duties on foreign competing products. A curious illustration is found in the duties on such colonial products as coffee and cocoa. Under the tariff legislation of 1892 these were "half assimilated"; that is, they were admitted at one half the duties levied upon coffee and cocoa coming from foreign countries. The colonies demanded the full application of the principle of assimilation—that their coffee and cocoa should be admitted free; and this was finally granted in 1912. The obvious effect is that they get a pro-

tection equal to the duties, designed to be purely fiscal, upon foreign coffee and cocoa. To all intents they get a bounty equal to the amount of this duty; precisely as Hawaiian sugar had a quasi-bounty in the United States under the reciprocity arrangements which preceded our formal acquisition of Hawaii. Underneath the whole discussion of these duties one sees the influence of the persistent notion, fostered by the usual protectionist mode of discussion, that a duty on imports is a tax not on the country in which the imports are consumed but one on the country whence the imports come.

The tariff reformers in France, among whom the author is to be ranked, are now championing the principle of "tariff personality." This means that each of the important colonies (such as Madagascar and Indo-China) is to be treated separately, and that tariff arrangements are to be made to suit the special needs of each colony. Evidently an important aim is that foreign products shall be admitted into these colonies not at the full rates of the French tariff (as they are under the policy of assimilation) but at lower rates. Professor Girault supports this policy by considerations of all kinds, among them some that are designed to appeal to the protectionists themselves. He maintains, for example, that the unflinching application of the French tariff régime lays burdens upon some of the colonies, prevents them from developing, and hence prevents them from being good customers for the French themselves—the old story of the supreme importance of sales, customers, markets!

The reader interested in the details of colonial policy will find in Professor Girault's book as clear a statement of the intricacies of French colonial methods as is consistent with completeness and fullness. At best the description cannot be made entirely simple. The different colonies are subjected to very different treatment, even beyond the general division into assimilated and non-assimilated colonies. These differences, moreover, are brought about not merely by legislation, but by the administrative decrees which French legislative practice so often authorizes. The discretion commonly given to administrative authorities in France has great advantages, permitting an elasticity and flexibility which the rigor of our cumbrous American laws makes impossible. But this same circumstance brings no small difficulties for the student, who can ascertain the actual working of a particular measure only by following a series of administrative decrees not recorded in the sources

usually accessible to him. This volume enables one to follow the situation in all essentials; and altogether it is to be commended as a well-balanced and thorough piece of scholarly work.

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NEW BOOKS

AGHNIDES, N. P. *Mohammedan theories of finance. With an introduction to Mohammedan law and a bibliography.* Columbia University studies in history, economics, and public law, vol. LXX, no. 166. (New York: Longmans. 1916. Pp. 540. \$4.)

The author calls his dissertation "an attempt to give a comprehensive exposition of the Mohammedan financial theories in their entirety with special emphasis, when possible, on the reasons underlying them." The reservation is quite in point, and his desire to be superlatively comprehensive has tempted him to stray from his declared object into bypaths where at times he narrowly escapes losing himself: *Qui trop embrasse, mal étreint*.

The germ of the Muhammadan system of finance is contained in Surah VIII, 42, of the Qur'an, rightly entitled "The Spoils." Its development could not help being influenced by the characteristic notions of Islam, which recognizes the individual rather than the community and even now has no clear conception of the idea we express by the word state. Based on the division of the spoils of war in its primary stage, it subjected the conquered unbeliever to a tribute, intended to defray the expenses of the general administration while the zakat or tax imposed upon the well-to-do believer was exacted, as the name implies, by way of purification—namely, to sanctify his possession of the remainder—and constituted a separate fund, called God's property, to be kept apart from the common property of the Moslem because devoted to charitable purposes. With a more arbitrary since more opportunist interpretation of law and custom in the matter of finance, the observance of this distinction became less strict and the financial system assumed gradually the forms expatiated upon by the author principally from the standpoint of the Hanefites.

Dividing his work into two parts, the first of which serves as an introduction to the second or main one, a treatise on the financial theories proper, the author overwhelms us with a mass of detail, in itself very instructive but not always relevant or of proportionate explanatory value, and sometimes hard to disentangle. He presupposes a good deal of discrimination in his readers, who need much patient labor to arrive at a correct classification of the minutiae adduced to illuminate the evolution of modes of procedure illustrative of the truth, nowhere more discernable than in Muhammadan theories of finance, though this dissertation leaves it only to be inferred, that in the beginning men create institutions in the end to be moulded and governed by them.

The volume concludes with the announcement of a third part in which the origins of the Muhammadan system of taxation and its relation to theory will be discussed.

BROWN, J. C. *Every American's business; the tariff and the coming trade war.* (New York: M. Kennerley. 1916. Pp. 313. \$1.50.)

CLOUD, J. D. *The financial problem of cities.* (Cincinnati, O.: J. D. Cloud. 1916. Pp. 16.)

CUSTIS, V. *The state tax system of Washington.* (Seattle: University of Washington. 1916. Pp. vi. 142.)

GAFFNEY, J. P. *Taxation and new sources of revenue.* (Philadelphia: Finance Committee of the Philadelphia Councils. 1916. Pp. 22.)

GRUNZEL, J. *Economic protectionism.* Carnegie Endowment for International Peace. (Oxford: Clarendon Press. 1916. Pp. xiii, 357. 8s. 6d.)

To be reviewed.

HECHT, R. S. *Municipal finances of New Orleans, 1860-1916.* (New Orleans: Hibernia Bank & Trust Co. 1916. Pp. 32.)

HOBSON, J. A. *The new protectionism.* (London: Unwin. 1916. Pp. xx, 152. 2s. 6d.)

HOSMER, F. J. *The tariff. A short study upon an important subject.* (Boston: Home Market Club. 1916. Pp. 45.)

LAGAILLARDE, J. *L'impôt sur les bénéfices des guerre extraordinaires.* (Toulouse: Librairie Soubiron. 1916.)

LEWIS, H. T. *Summary of the revenue laws of Idaho.* (Moscow: Univ. of Idaho. 1916.)

MCDONALD, E. L. *Taxation of mortgages in Kentucky.* (Louisville: Real Estate Board. 1916. Pp. 67.)

MADSEN, A. W. *The state as manufacturer and trader. An examination based on the commercial industrial and fiscal results obtained from government tobacco monopolies.* (London: Unwin. 1916. Pp. ix, 281. 7s. 6d.)

MOHUN, B. *The United States income tax law, the estate tax law, the munition manufacturer's tax law, and the capital-stock tax law, approved September 8, 1916.* (Washington: B. S. Adams. 1916. Pp. 70. 50c.)

MONTGOMERY, R. H. *1917 income tax procedure.* (New York: Ronald Press. 1916. Pp. 450. \$2.50.)

TUCKER, R. S. *A syllabus in public finance.* (Ann Arbor: Univ. of Mich. 1916. Pp. 38. 75c.)

UNDERHAY, F. G. *Income tax.* New edition. (London: Ward, Lock. 1916. Pp. 272. 2s.)

WITHERS, H. *International finance*. (New York: Dutton. 1916. Pp. viii, 186. \$1.25.)

ZOLLER, J. F. *Taxation of business corporations in the state of New York*. (New York: Real Estate Assoc., State of N. Y. 1916. Pp. 27.)

Civic assessment commission report. (St. John, N. B. 1916. Pp. 139.)

The cost of municipal government in Massachusetts. Ninth annual report on the statistics of municipal finances for city and town fiscal years ending between November 30, 1914, and March 31, 1915. Pub. Doc. No. 79. (Boston: Bureau of Statistics. 1916. Pp. xxxi, 301.)

Income tax law; analysis and comment. (Third edition.) *Together with estate tax law*. (New York: Harris, Forbes & Co. 1916. Pp. 125.)

List of references on the taxation of intangible property (with special reference to mortgages). Typewritten. (Washington: Library of Congress. 1916. Pp. 6.)

The Massachusetts income tax. (Boston: Old Colony Trust Co. 1916. Pp. 57.)

New federal tax laws, September 8, 1916; income tax law, war revenue law, estate tax law, munitions tax law, miscellaneous taxes. (New York: Broadway Trust Co. 1916. Pp. 22. 50c.)

New York City's administrative progress, 1914-1916: a survey of various departments under the jurisdiction of the mayor. (New York: Dept. of Finance. 1916. Pp. 351.)

A report based on a survey conducted by Henry Bruère, city chamberlain.

Omnibus revenue act of 1916. (San Francisco: Savings Union Bank and Trust Co. 1916. Pp. 90.)

Single tax and its Cleveland champions; letters and answers published in the Catholic Bulletin. (Cleveland, O.: Prompt Prtg. Co. 1916. Pp. 32. 5c.)

Standard manual of the income tax. 1917 edition. (New York: Standard Statistics Co. 1917. \$2.50.)

Status of bonds under the federal income tax. Advance 1917 edition. (New York: Standard Statistics Co. 1916. Pp. 158. \$2.)

The secured debts tax law of the state of New York, and the mortgage tax law of the state of New York. (New York: Guaranty Trust Co. 1916. Pp. 56.)

Summary of Australian financial statistics, 1906-1915. Finance bulletin no. 9. (Melbourne: Office of Statistics. 1916. Pp. 82.)

The transfer tax law of the state of New York, complete, including the amendments of 1916, being the article entitled "Taxable transfers,"

- constituting article 10, chapter 62, of the laws of 1909, as amended.* (New York: Guaranty Trust Co. 1916. Pp. 47.)
- Translation of the New Chilean customs tariff law, with comparison of the new rates of duty and those leviable under the former tariff.* (London: King. 1916. 1s.)
- The United States tariff commission, in effect September 9, 1916.* (New York: Guaranty Trust Co. 1916. Pp. 15.)
- War loans and war finance.* Second edition. (New York: Mechanics & Metals National Bank. 1916. Pp. 39.)
- The work of the Colorado tax commission. A report prepared for the Survey Committee of State Affairs, state of Colorado,* by ROBERT MURRAY HAIG, with a letter of comment by EDWIN R. A. SELIGMAN. (Denver: Denver Civic and Commercial Assoc. 1916. Pp. 53.)
- Your income tax.* Revised edition for 1916-1917. (London: Nelson. 1916. 1s. 6d.)
- 1916 budget of the city of Rochester, N. Y.* (Rochester: City Comptroller. 1916. Pp. 47.)

Population and Migration

NEW BOOKS

- CASTLE, W. E. *Genetics and eugenics.* (Cambridge: Harvard Univ. Press. 1916. Pp. 320. \$1.50.)
- FRANKEL, L. K. *A study of mortality statistics of southern communities.* (New York: Metropolitan Life Ins. Co. 1916. Pp. 8.)
- GURNEY, A. E. *The population of the Polish commonwealth.* (London: Allen & Unwin. 1916. Pp. 40. 6d.)
- MORE, A. *Fecundity versus civilization. A contribution to the study of over-population as the cause of war and the chief obstacle to the emancipation of women, with special reference to Germany.* (London: Allen & Unwin. 1916. Pp. 52. 1s.)
- TURQUAN, J. and DAURAIC, J. *La dépopulation française. Propositions pour la repopulation.* (Paris: Tallandier. 1916. 1.25 fr.)
- Population and vital statistics.* Bulletin no. 33. Commonwealth demography, 1915, and previous years. (Melbourne: Commonwealth Bureau of Census and Statistics. 1916.)
- Lectures and addresses on the negro in the South.* (Charlottesville: Univ. of Virginia. 1916. Pp. 128.)
- The sanitary progress and vital statistics of Hawaii.* (Newark, N. J.: Prudential Press. 1916. Pp. 82.)
- The literacy test for immigrants; a debate.* (Chicago: Delta Sigma Rho, Univ. of Chicago Chapter. 1916. Pp. 62. \$1.)

Social Problems and Reforms

Criminality and Economic Conditions. By WILLIAM ADRIAN BONGER. Translated by HENRY P. HORTON. The Modern Criminal Science Series, published under the auspices of the American Institute of Criminal Law and Criminology. (Boston: Little, Brown, and Company. 1916. Pp. xxxi, 706. \$5.50.)

The author of this volume is one of the founders of the International Union of Penal Law and is perhaps the most eminent of Dutch criminologists.

In one sentence the book may be characterized as a statement of the socialist's basis of criminology and his refutation of Lombroso's theory of "the born criminal." It has, however, an interest for a much larger circle than is included by the designation of socialists, for Dr. Bonger has gathered much valuable material, all of which he presents so fairly that even those who would question the validity of his reasoning and his philosophy will find the book an aid to clear thinking.

More than one third of its 700 pages are devoted to summaries and criticisms of the literature dealing with the relation between criminality and economic conditions from the time of Thomas More to the present day. It is interesting to note that Robert Owen, one of the precursors of modern criminal science, in 1844 gave expression to views that, in general, accord with Dr. Bonger's conclusions, and which he sums up as follows: "It is not the man himself, it is his circumstances that form his character. An unfavorable environment produces a bad man, a favorable one, a good man, but the organization of the society of today is such that it awakens in a man all evil qualities."

Dr. Bonger presents interesting testimony of the statisticians who showed that with an increase in the price of grain there came a corresponding increase in the number of crimes against property together with a general decrease in the number of crimes against morals and against the person. While he does not impeach the validity of this reasoning, he warns against considering this European experience of the middle of the last century as a law of nature. Quite naturally he devotes considerable attention to the analysis and criticism of the doctrines of Lombroso, Ferri, and other members of the Italian school of criminology. His informing criticism of Ferri's anthropological, cosmic, and social factors brings the reader to a much better understanding of the content of the expression "economic conditions."

In the second part of the book the author devotes himself to a presentation of the present economic system and its consequences, and by abundant statistics he endeavors to show that the capitalist scheme of production is the cause of the crime which the weaknesses of the individual lead him to commit. While his study of the relationship of the economic conditions to crimes against property is enlightening and convincing, he is not so successful when he comes to show this same relationship in sex crimes and other crimes against the person.

In a short chapter covering ten pages near the end of the book he deals with the individual factor in crime, which in his social philosophy is clearly recognized in pathological crimes only. The number of criminals who are qualitatively different from the general group he deems almost negligibly small; but Dr. Spalding found in the examination of 400 women offenders at the Massachusetts Reformatory for Women that there were 37 per cent of abnormal mental cases. Likewise in a detailed examination of the first 300 cases in the Massachusetts Reformatory (for men) Drs. Stearns and Rossy found 22 per cent were feeble-minded, 9.6 per cent border-line cases, and 3.3 per cent probably psychotic. The highest percentage of the feeble-minded was found among prisoners guilty of sex offenses and the lowest among prisoners guilty of crimes against property, while the percentage of those who were probably psychotic subjects was highest among prisoners guilty of crimes against life. Dr. Healy throws additional light on this subject in his investigation of 1,000 young recidivists among whom he found 247 who were either morons, imbeciles, or were suffering from subnormal mentality or psychosis.

The individual case analyses that are being made by Drs. Healy, Guy Fernald, Spalding, and others are throwing light upon this individual element which Dr. Bonger considers either secondary or negligible in amount, but which they are finding too large in volume to dispose of in this way. In the normal man economic conditions provide the best explanation why crimes are committed but these recent researches would go to show that in about 25 per cent of the cases the criminal is physically or mentally predisposed to crime and the number may prove to be larger.

To Dr. Bonger's statement that "to be a good criminologist it is necessary to be a statistician but it is necessary to be a sociologist also" must now be added that he must likewise be a psychologist.

Readings in Social Problems. By ALBERT BENEDICT WOLFE.
(Boston: Ginn and Company. Pp. xiii, 804. 1916.
\$2.80.)

In determining the field to be covered by a compilation of writings on social problems, Professor Wolfe has done wisely to make the question of population his central theme. While the economic activities of society are often truthfully referred to as basic, yet there is no department of the social organization which touches so intimately and intricately practically all human relationships as that which includes the growth, size, and make-up of the population; even the economic organization itself is largely determined by the density of population. If the sociological training of young people for active and useful life in society were restricted to the mastery of one single topic, that topic should emphatically be the laws of population. A book dealing broadly and authoritatively with this subject has therefore abundant *raison d'être*. For the rest, its success and usefulness depend largely upon the judgment with which the selections are chosen.

Professor Wolfe gives evidence of wide knowledge of the literature and of careful discrimination in his choice of the selections which he has brought together. He has avoided the two undesirable extremes, on the one hand of choosing startling and novel but erratic and inconclusive discussions, and on the other hand of limiting himself to thoroughly standard and classical writings, which convey general truths already broadly familiar and therefore lacking in inspiration. The topics covered in this book fall under five main heads: *viz.*, Problems of Population, Immigration, The Woman Problem, Marriage and Divorce, and the Negro Problem in the United States. The author believes in the historical approach to modern social problems as the only method of acquiring a sound perspective, and therefore many of his selections are from writers of several generations ago. This comparison of the opinions of widely separated periods with reference to enduring human relationships is decidedly stimulating and suggestive. On the other hand, the passages from contemporary writers set forth some of the latest and most advanced views with reference to live issues. The author displays an admirable impartiality in his selections, concealing very successfully any predilections he may have in one direction or another.

It would be obviously out of place for the reviewer to attempt to criticise the subject-matter of the various chapters. The

writers from whose works Professor Wolfe has made his selections are almost all well-known and recognized authorities in their various spheres; the passages chosen are those in which each voices his special message most succinctly and clearly. There is therefore a fund of diversified and vigorous thinking on social topics, which the reader is free to weigh and evaluate according to his own judgment and standards. The book will be found to be a valuable reference work for those already somewhat familiar with the topics treated, and undoubtedly an excellent educational medium for the student who approaches the subject for the first time.

HENRY PRATT FAIRCHILD.

Yale University.

NEW BOOKS

ANSTRUTHER, E. H. *The farm servant.* (London: Allen & Unwin. 1916. Pp. 410. 6s.)

ARONOVICI, C. *The social survey.* (Philadelphia: Harper Press. 1916. Pp. 255. \$1.25.)

ATHERTON, S. H. *Survey of wage-earning girls below sixteen years of age in Wilkes-Barre, Pennsylvania, 1915.* (New York: National Child Labor Committee. 1915. Pp. 65. 25c.)

Largely local in value, this study suggests a type of volunteer service which is needed in every community, to interpret the community to itself. If the allied forces for betterment in each of our industrial centers of moderate size (Wilkes-Barre numbered 67,105 population in 1910) would put to themselves the queries raised by Mrs. Florence Kelley in the preface, and answered in the report, society might be stirred to eliminate some of the dreariness here pictured.

The survey contributes less to knowledge of industrial than of social questions. It helps to roll up data with regard to wages and shifting of employed minors, and the consequences, but it adds no new facts. It does, however, introduce us to social conditions when it tells us that 50 per cent of the families are Roman Catholic in religion; that "of 175 families whose fathers are foreign born," 84 daughters report no other language than English; that one fifth of the group studied (21.9 per cent) left school before they were 14 years of age, or illegally; that as many girls are idle as at work between 14 and 16 years of age (also contrary to law) if one interprets the chart correctly; that 30 per cent of the families represented are below the poverty line (if we may accept \$2 weekly income per capita without rent as the margin of safety).

The schedule is not printed, the tables and graphic material are grouped at the end of the pamphlet; unfortunately the legends are

inaccurate (VI, 3) or insufficient (VI, 4), and the presentation is sketchy. But the city of Wilkes-Barre will be the better for its accomplishment.

SUSAN M. KINGSBURY.

BASCOM, E. L. and MENDENHALL, D. R. *List of books and pamphlets on infant welfare.* (Madison, Wis.: Free Library Commission. 1916.)

BIRGE, W. S. *True food values and their low costs, or economy in living.* (New York: Sully & Kleinteich. 1916. Pp. 218. 50c.)

BLACKFORD, K. and NEWCOMB, A. *Analyzing character, the new science of judging men; misfits in business, the home and social life.* (New York: Review of Reviews Co. 1916. Pp. 488.)

BRUCE, A. A. *Property and society.* (Chicago: McClurg. 1916. Pp. 150. 50c.)

DUNLOP, D. N. *British destiny. The principles of progress.* (London: Path Pub. Co. 1916. Pp. xi, 113. 3s. 6d.)

ESTABROOK, A. H. *The Jukes in 1915.* (Washington: Carnegie Inst. 1916. Pp. 85. \$2.50.)

FAIRCHILD, H. P. *Outline of applied sociology.* (New York: Macmillan. 1916. Pp. 353. \$1.75.)

To be reviewed.

FRANCKE, M. *Opportunities for women in domestic service.* (Philadelphia: Assoc. of Collegiate Alumnae. 1916. Pp. 64. 50c.)

GLADSTONE, H. *The abolishment of poverty in United States.* (Chicago: Society for Advancement of Public Economy. 1916. Pp. 143.)

HARRISON, S. M. *Community action through surveys.* (New York: Russell Sage Foundation, Dept. of Surveys and Exhibits. 1916. Pp. 23. 10c.)

HEDGES, A. C. *Vocational training of girls in the state of New York.* (Albany: Dept. of Education. 1916. Pp. 41.)

HEDGES, A. C. *Wage worth of school training. An analytical study of six hundred women-workers in textile factories.* (New York: Teachers College, Columbia University. 1915. Pp. 173.)

The study purposes "to gain first-hand and authoritative information for intelligent promotion of industrial training of girls for higher and more progressive wage earning," through data secured from schedules filled out by workers in factories. It claims that the trades require "health, habits of industry, and mental understanding of the demands of industrial organization." It concludes that a revision of school methods is necessary in order to secure "habits of concentration and speedy, accurate and coöperative work." The author lays emphasis on the need for dexterity and skill and advocates day-time classes in the factory conducted co-operatively by public school and employer.

The data (schedules secured from 605 workers in the factories of four different firms, each of different type) are insufficient foundation for the elaborate statistical analysis presented, and the interpretation is confused and inconclusive.

The endeavor to measure wage and experience by means of indices is commendable. But the definitions are frequently inaccurate or clumsily expressed, as in reference to experience-index and wage-index (p. 36); the calculations are unnecessarily complex; the use of the term "quartile" is incorrect (chart 14); unjustified comparisons are made between groups of very unequal size (chart 8); and the tabular and graphic presentations fail of their purpose by reason of their unscientific and unclear form and legends. (See especially tables 37 and 42 and chart 16.)

SUSAN M. KINGSBURY.

HUDSON, M. O. *A complete new set of laws for the welfare of all Missouri children.* (Columbus: Missouri Children's Code Commission, State University. 1916.)

HDLER, J. and others. *The houses of Providence.* (Providence, R. I.: Chamber of Commerce. 1916. Pp. 96.)

KELYNACK, T. N. *The child welfare annual.* (London: John Bale, Sons, & Danielsson. 1916. Pp. 346. 7s. 6d.)

LAPP, J. A. *Our America. The elements of civics.* (Indianapolis: Bobbs-Merrill. 1916. Pp. 399. \$1.25.)

Written to set forth the elementary facts of government in this country. Contains chapters on "Some rural problems," "Conservation," "Controlling business," "Where the money comes from," and a bibliography.

LEESON, C. *The child and the war. Being notes on juvenile delinquency.* (London: Demy. 1916. 1s.)

MCGARRAH, A. F. *Modern church finance, its principles and practice.* (New York: Revell. 1916. Pp. 328.)

MINER, M. E. *Slavery of prostitution; a plea for emancipation.* (New York: Macmillan. 1916. Pp. 308. \$1.50.)

NEARING, S. *Poverty and riches; a study of the industrial régime.* (Philadelphia: Winston. 1916. Pp. 261. \$1.)

NOLAN, J. *More houses for Bridgeport.* (Bridgeport, Conn.: Chamber of Commerce. 1916. Pp. 62.)

ROSE, M. S. *Feeding the family.* (New York: Macmillan. 1916. Pp. 449. \$2.10.)

SHEPHERD, R. P. *Essentials of community efficiency.* (Chicago: Printed for the author by the Abingdon Press. 1916. Pp. xiii, 273. \$1.)

SMITH, H. B. *Establishing industrial schools.* (Boston: Houghton Mifflin. 1916. Pp. 166. 60c.)

- TOURNAN, I. *Le régime de l'alcool, sa réforme nécessaire.* (Paris: Dunod & Pinat. 1916. Pp. 492. 9 fr.)
- WHEELER, W. B. *Federal and state laws relating to intoxicating liquor.* (Westerville, O.: American Issue Pub. Co. 1916. Pp. 96. 25.)
- WILSON, L. A. *A list of helpful publications concerning vocational instruction.* (Albany: N. Y. State Univ. 1915. Pp. 52.)
- Among industrial workers (ways and means) a hand book for associations in industrial fields.* (New York: Y. M. C. A., Indus. Dept. 1916. Pp. 118. 50c.)
- First annual report of the Department of Public Welfare, 1915-1916.* (Dallas, Texas: Dept. Public Welfare. 1916. Pp. 88.)
Reports the operations of the employment bureau.
- International Health Commission, second annual report, January 1, 1915-December 31, 1915.* (New York: The Commission, 61 Broadway. 1916. Pp. 204.)
- The progress of housing reform in Brooklyn.* (Brooklyn: Tenement House Committee. 1916. Pp. 47.)
- Prostitution: the moral bearings of the problem.* (London: King. 1916. 2s.)
- Report of the advisory committee on proposals for the state purchase of the licensed liquor trade.* (London: Wyman. 1916. 1d.)
- Rural school sanitation including physical and mental status of school children in Porter County, Indiana.* U. S. Public Health Bulletin no. 77. (Washington: Public Health Service. 1916. Pp. 127.)
- School nurse.* Bulletin of the Russell Sage Foundation Library. (New York: Russell Sage Foundation. 1916.)
- A tabular statement of infant-welfare work by public and private agencies in the United States.* Infant mortality series. no. 5. (Washington: Children's Bureau. 1916. Pp. 114.)
- Statistiques annuelles des établissements pénitentiaires et des institutions d'assistance, année 1915.* Printed in English and French together. (Quebec: Bureau of Statistics, Dept. of Provincial Secretary. 1916. Pp. 133.)

Insurance and Pensions

- United States Life Tables, 1910.* Prepared under the supervision of JAMES W. GLOVER. (Washington: Bureau of the Census. 1916. Pp. 65.)

American economists will welcome as a publication of the first importance a recent volume of the Census Bureau entitled *United States Life Tables*. This volume makes at once available the essential data on the average length of life of the several classes

of the community, and more especially in the Eastern and industrial sections of the country. For the first time in our national history, facts have been compiled which are as authoritative as those which have long been available for the advanced European countries. The government has recognized the importance of its human resources, and has taken the first step in a national campaign for life conservation.

A few American life tables have previously been compiled from insurance experience. The federal government has also published from time to time life tables for the larger cities, but these have no scientific or actuarial value. Professor Glover's connection with the present venture guarantees an absolutely sound actuarial basis for this work. Yet with all of their technical excellence these tables have been prepared with an eye to the widest public use. Their arrangement is extremely simple, following a very natural sequence from the more general to the more specific groups. The explanations are detailed, are non-technical in character, and are illustrated with examples. Public health officials, students of vital statistics, physicians, sociologists, economists, and all persons interested in the public health movement of America will find the tables a valuable reference source. The Census Bureau, Professor Glover, and the country at large are all to be congratulated on the highly successful outcome of this important scientific work.

The tables are based on the census enumeration of 1910 and the mortality returns of the three years 1909, 1910, and 1911 for the ten original registration states and the District of Columbia. There are in all twenty-five life tables. The first is for both sexes in the original registration states; the next fourteen are for males and females respectively in the following seven classes of the population: aggregate, white, negro, native white, foreign white, cities, and rural. The last ten tables are for males and females respectively in five states—Indiana, Massachusetts, Michigan, New Jersey, and New York.

The first table is probably the most important, being based on the largest exposure, namely 24,000,000 enumerated lives and 1,000,000 reported deaths. According to this table the average expectation of life of persons in these registration states is, at birth, about 51 years. For a man, the average is a little under 50 years and for a woman it is 53 years. The tables make no attempt to explain these differences but if an explanation is allowable it may be pointed out that men are the more exposed to death

from homicide, suicide, and the accidents that occur in industry. Women are largely free from these violences. The female sex has also a lower mortality rate in infancy, which is, indeed, continued year for year throughout life.

Later tables indicate that the whites have a longer average life span than the colored; at birth it is 16 years greater. It is also greater at various points throughout life. Thus, at age 25 the average white man may expect to survive 38.8 years while the colored man at the same age has only 30.4 years left to him. So, too, a white woman at 25 may expect to live 40.9 years while a colored woman has eight years less. These differences are important since they affect adult life when every additional year counts for usefulness to the individual and society.

The tables also show the difference in average life span between native and foreign born persons. The native born whites of both sexes enjoy very decided advantages in life expectation over the foreign born whites at the same ages. More important, perhaps, is the difference shown in the expectation of life of those living in the cities as compared with those living in the country. The average white man living in the rural districts has nearly eight years more of life than if born in the city. The expectation of life of white women living in the country, is also increased over their city sisters, but only by six years. This condition is undoubtedly related to the fact that the rural population is less subject to tuberculosis, pneumonia, Bright's disease, and the diseases of the digestive system. The differences in the race composition of the rural and urban populations should also be kept in mind. The cities contain a large proportion of foreign born; the rural areas are more American in their composition. As the writer recently showed in this journal,¹ this factor plays an important part in determining death rates and incidentally the average expectation of life. For the same reason great caution is required in making comparisons of the life expectations in such states as New York and Massachusetts on the one hand with Indiana and Michigan on the other. The latter states are composed largely of persons of native stock, the former contain a large proportion of foreign born.

Reference may be made to a source of error which affects the tables somewhat. The registration of deaths, even as late as 1910,

¹ "Factors in American Mortality," *AMERICAN ECONOMIC REVIEW*, vol. VI, no. 3 (Sept., 1916), p. 523.

was not perfect, and defects were especially marked in the rural areas of the states. Such under-registration has the effect of decreasing the death rates and conversely increasing the expectation of life for the areas in question. It is possible that this factor plays a part in the difference noted above between the expectation of life in rural and urban populations.

An excellent beginning has been made. It is to be hoped that the plans for the 1920 federal census will make provision for a continuation of Professor Glover's work and that we may have authentic life tables for the same and additional registration states for 1920. Comparisons with the earlier tables will prove valuable in many ways. They will indicate the progress in life conservation made in the decade; they will throw light on the effectiveness of our several health programs, especially with reference to infant mortality; and they will, perhaps, decide the moot question as to whether the suspected increase in our mortality after 45 is fact or fancy.

LOUIS I. DUBLIN.

Metropolitan Life Insurance Company.

Standards of Health Insurance. By I. M. RUBINOW. (New York: Henry Holt and Company. 1916. Pp. 322. \$1.50.)

It would be well if every new effort for social reform could be accompanied by so useful a popular presentation of its nature as this volume of Dr. Rubinow's, which describes the elements of health insurance and untangles many of its complexities. To the thoughtful layman it will serve to make explicit the difficulties of a complex theme and so to give a basis for intelligent judgment. Herein lies its function rather than in any contribution to the theory of social insurance. It is, in addition, an appeal for the new legislation addressed to novices and to the skeptical.

A chapter on the principle of compulsion is followed by chapters on scope and extent. These grow out of the developments in Europe. The recommendation appears that the medical service of accident compensation in our American states should be taken over by the corresponding service under health insurance. This recommendation can be warmly seconded. The cost of specific occupational diseases, it is proposed, should fall to the accident compensation system. But this demands drawing a line of demarcation, which must be more or less arbitrary, and makes for difficulties which the German system is fortunate in avoiding. In-

validity, the author rightly holds, should not be dealt with under the same plan as sickness and this recommendation accords with the projects for legislation now being advanced in our country. In that case, however, an interesting question of nomenclature is revived. It will be recalled that the term "health insurance" lately adopted in this country was nowhere current until chosen by Great Britain. But the British act, unlike proposed American acts, did include invalidity along with sickness. In Germany sickness insurance and invalidity insurance are mutually exclusive both in name and character. Some day, however, we in the United States may find ourselves administering under separate acts both "health insurance" and "invalidity insurance"!

The general theory of insurance, which Dr. Rubinow holds, is that the worker has certain rights against those of the consumers of products. With him, as with the authors of a recent treatise on labor legislation, the contracting wage-earner defines the basis of social action. Here, it seems to me is a curious survival of a legalistic philosophy, the more curious indeed as the institutions and laws to be defended are in contradiction to it. Let Dr. Rubinow speak (his subject is the extension of benefits to members of the family):

The entire philosophy of social insurance is based upon the causal connection between employment and disability on one hand and between disability and unemployment on the other (p. 90). The demands of life evidently appear stronger than any theoretical constructions. A purely formal connection between the insurance of the wage-worker and that of the members of his family may be lacking, but the social advantages of utilizing the established medical organization for the benefit of the entire working population are so great that any logical inconsistency may be calmly disregarded (p. 91).

The one advantage, I have felt, that the term "social insurance" has over "workmen's insurance" is just this: that it deals with the situation of certain social groups rather than with the circumstances of a wages contract. Obviously, if the theory of insurance is to be recast then also the argument concerning the basis of contributions must be recast. A suggestion of divergence from the simpler theory of contractual losses was given in this country when the state of Washington, for example, fixed uniform indemnities for fatal industrial accidents. But Dr. Rubinow is himself on still another occasion—*c.g.*, the discussion of money benefits (p. 91)—led to argue for the interests of social groups. Should he not, therefore, enlarge the fundamental argument for insurance?

The detail of these chapters on medical, money, maternity, funeral, and optional benefits is worked out in the main clearly and convincingly. The author hopes for adequacy of treatment, and his hope, with allowance for experimental beginnings, may be warmly shared. I have long felt that we should frankly let maternity benefit stand on a separate basis. Dr. Rubinow is satisfied that we are dealing with "a physiological process" which "requires medical aid" and "produces temporary disability." "That is sufficient," he says, "to put it into the category of emergencies that a health-insurance system should deal with" (p. 117). But the peculiarity of childbearing is that not only does volition play an important and increasing role, but the coming of disability can be timed long in advance and with certainty, and the burdens of a maternity epoch are a fraction only of the general responsibilities assumed. Here is no "emergency" akin to that of pneumonia, or cancer, but a unique problem to be managed under sickness insurance for convenience and simplicity only. To hold further that maternity insurance "forms a natural sequel to legislation prohibiting wage-work to women for some definite time before and after maternity" (p. 122), remembering that the wives of insured men are also to be involved, is to hold (is it not?) that laws restricting child labor should have for a natural sequel a granting of support to those thereby deprived of employment. I am not arguing against maternity insurance, for that is a different question, but only against what seems to me to be a confused assimilation of dissimilar things.

The chapter on Bearing the Cost contains much that is incisively and persuasively put. It includes, as does the following chapter on Distribution of Cost, something upon the rationale of the workmen's burden. I cannot but believe that these chapters would do better to emphasize the fact that sickness has a very broad personal basis. If we are to hold that the worker's responsibility is nil because in his every act, unlike the rest of us, he is the victim of hereditary or environmental forces, then we might content ourselves with speaking of the desirability of democratic participation in management, or the peculiar disadvantages of minimum benefits. But, after all, how we eat, drink, sleep, and go clothed have much to do with illness and cannot wholly be laid to the door of a general society. Some of this is contained in an opinion of Mr. Dawson's which Dr. Rubinow quotes. But in an epoch when many workmen's representatives are asking that

workmen contribute nothing at all, a handbook on health insurance should as clearly define the basis of the workmen's contributions as that of the other contributions. I am personally inclined to hold further that the amount of the money benefit should stand in some relation to the size of the workman's contribution. But Dr. Rubinow believes that the workmen's contribution should be slight, slighter indeed than in any important European plan, and that the money benefit should be high. There is in these chapters a discussion of the shifting of the incidence of the burden, but it is confused and not helpful; it even lumps rents among the ultimate bearers of the cost.

With much clearness and discrimination, the concluding chapters deal with the various problems of organization and administration. They rest upon a careful study of experience in Europe and under our own compensation acts, and must be enlightening to many an American now puzzled by the complexities which the reformers bespeak for sickness insurance. Especially will benefit come to the layman who is anxious to understand the bases and to measure the limits of the financial charges. These last chapters deal with matters that long remain difficult to the student of social insurance.

The work as a whole, barring certain questions of theory or principle, which discussion in such a journal as the REVIEW may properly emphasize, is one which for its vigor, brevity, and discrimination in detail deserves a wide reading.

ROBERT F. FOERSTER.

Harvard University.

NEW BOOKS

- APPLETON, H. D. *Automobile insurance. Should fire companies be authorized to give full coverage, including the person?* (Albany: The author. 1916. Pp. 12.)
- BREUIL, R. *Assurances et assureurs.* (Paris: Giard & Brière. 1916. 3.50 fr.)
- COWLES, W. G. *The New York standard compensation policy.* (New York: Travelers Insurance Company. 1916. Pp. 21.)
- DOSKER, N. H. *Workmen's compensation law of Kentucky annotated and explained.* (Louisville: Baldwin Bk. Co. 1916. Pp. 416. \$4.50.)
- DUDLEY, W. A. *Finance and life insurance; a handbook of tables and formulae, with rules and explanations.* (Mexico, Mo.: Missouri Prtg. & Pub. Co. 1916. \$5.)

- ECKERT, J. A. *Use and occupancy insurance. An address delivered before the one hundred and thirty-seventh meeting of the Insurance Society of New York on November 14, 1916.* (New York: Ins. Soc. of N. Y. 1916. Pp. 13.)
- HONNOLD. *Honnold on workmen's compensation.* Two volumes. (Rochester, N. Y.: Lawyers Coöp. Pub. Co. 1917. \$15.)
- JONES, F. R. *Digest of workmen's compensation laws in the United States and territories, with annotations: 1916 supplement.* (New York: Workmen's Compensation Publicity Bureau. 1916. \$1.25 and \$2.)
- MACKEY, H. A. *Pennsylvania workmen's compensation act, annotated.* (Chicago: Callaghan. 1916. Pp. 1179-1254.)
- MATTHEWS, W. D. *The insurance engineers' hand book. A revision of the manual of inspections published in 1908.* (Louisville, Ky.: Ins. Field Co. 1916. Pp. vi, 722. \$4.)
- PAYNE, H. B. *Ready reference to the workmen's compensation act of Pennsylvania, approved June 2, 1915.* (Wilkes-Barre, Pa.: R. Bauer & Son. 1916. Pp. 41.)
- PAYNE, H. B. *Synopsis of the workmen's compensation act of Pennsylvania approved June 2, 1915.* (Wilkes-Barre, Pa.: Bauer & Son. 1916. Pp. 15.)
- SCHNADER, W. A. *Workmen's compensation in Pennsylvania, with procedure and forms (annotated with decisions in Pennsylvania and other jurisdictions).* (Philadelphia: G. T. Bisel Co. 1916. Pp. lxiii, 594. \$5.)
- SHERMAN, P. T. *Workmen's compensation law; "personal injury by accident arising out of and in the course of the employment.* (New York: Workmen's Compensation Publicity Bureau. 1916. Pp. 67. \$2.)
- VENN, T. J. *Life insurance catechism; a treatise on protection, by means of questions and answers, in terms comprehensible to the general reader.* (Chicago: The author, 203½ Lane Court. 1916. Pp. 40. 50c.)
- Fire insurance laws, taxes and fees; containing a digest of the statutory requirements in the United States and Canada relating to fire insurance companies and agents, with many quotations from the statutes, also a compilation of county and municipal taxes and fees. Revised to August 1, 1916.* (Chicago: Spectator Co. 1916. Pp. 521. \$5.)
- Life insurance and how to sell it.* (Louisville, Ky.: Ins. Field Co. 1916. Pp. 106. \$1.)
- Little lessons in fire insurance, special qualifications, work of preparation, nature of the policy, rules for selecting risks, office organization, business forms, etc.* (Louisville, Ky.: Ins. Field Co. 1916. Pp. 144. \$1.)

National health insurance. Further report of the departmental committee on approved society finance and administration. Cd. 8396. (London: Wyman. 1916. 9 1/2d.)

The ready reference instruction book for fire insurance agents and farm solicitors. (New York: German American Ins. Co. 1916. Pp. 102. \$1.)

New York workmen's compensation law. (Albany: N. Y. Indus. Comm. 1916. Pp. 38.)

Workmen's compensation law of the state of Louisville. Revised with amendments to July, 1916. (New York: G. I. Wilson & Sons. 1916. Pp. 32. \$1.25.)

Workmen's compensation law of Porto Rico, July, 1916. (New York: W. F. Walsh. 1916. Pp. 19. 25c.)

The workmen's compensation act of Ontario (4 Geo. V, chap. 25), with amendments of 1915 and 1916 (5 Geo. V, chap. 24, 6 Geo. V, chap. 31) with regulations of board synopsis, etc. (Toronto. 1916. Pp. 122.)

Pauperism and Charities

NEW BOOKS

ALMY, F. *Ten tales; or salaries versus relief. Does it cost a dollar to give a dollar?* (Buffalo: Charity Organ. Soc. 1916. Pp. 39. 15c.)

Poverty and health. Thirty-ninth annual report of the Charity Organization Society of Buffalo. (Buffalo, N. Y.: The Society. 1916. Pp. 59.)

Proceedings of the national conference of charities and correction at Indianapolis, 1916. (Chicago: W. T. Cross, 317 Plymouth Court. 1916.)

Socialism and Co-operative Enterprises

NEW BOOKS

BROCK, A. C. *The philosophy of socialism.* (London: Fabian Soc. 1916. Pp. 12. 1s.)

DAUDÉ-BANCEL, A. *La coopération pendant et après la guerre.* (Paris: 208 rue Saint-Maur. 1916.)

GIDE, C. *Les sociétés coopératives de consommation.* Third edition. (Paris: Librairie de la Société du Recueil Sirey. 1917. Pp. xix, 354.)

HUGHES, T. J. *State socialism after the war; an exposition of complete state socialism; what it is; how it would work.* (Philadelphia: G. W. Jacobs & Co. 1916. Pp. 351. \$1.50.)

HUTCHINSON, R. H. *The "socialism" of New Zealand.* (New York: New Rev. Pub. Assoc. 1916. Pp. x, 155.)

While this little book gives few unfamiliar facts about New Zealand, it is important in that it shows the point of view of a socialist who has spent a year or more in that country and who wishes "to dispel the prevalent idea that her progressive institutions have in any way solved the problems of capital and labor."

Like Mr. Walling, the author would apply the term "state capitalism" to the social experiments of New Zealand; and says, with much truth, that they are designed largely for the benefit of the small farmers and shopkeepers, and that the result has been to entrench capitalism more strongly than ever in the affections of the middle class. The "Lib-Lab" alliance, which controlled New Zealand politics for so many years under Ballance, Seddon, and Ward, has reached the limit of its power, and now the small farmers and capitalists, under the leadership of Massey and the so-called "Reform party," show reactionary tendencies, while the labor leaders and socialists are breaking away from the old entanglements to take a new and more radical path, where true progress lies. The strike of miners and waterside workers in 1913 was a symptom of widespread dissatisfaction with industrial arbitration and other half-measures of social reform, and the election of 1914 showed that class conscious labor had at last a chance of coming to its own.

The experience of New Zealand, as Mr. Hutchinson says, indicates the lines of development which the United States is likely to take in the near future. The "Progressives," representing the interests of the small capitalists, are inaugurating a transition epoch of state ownership, industrial arbitration, pensions, insurances, minimum wages, and woman suffrage. After that, disillusionment will come, as in New Zealand, and the day of the working class will begin to dawn.

Mr. Hutchinson's book is very readable, and shows an intimate knowledge of the subject. Here and there one might cavil at his argument, as when he lays most of the blame for the watersiders' strike on the shoulders of the shipping companies, or when he says that the aggregate and per capita wealth of New Zealand had declined, from 1905 to 1913, without noting that Mr. Fraser, the government statistician, had recently adopted a new and more accurate method of estimating private wealth.

J. E. LEROSIGNOL.

PEASE, M. *Jean Jaurès, socialist and humanitarian.* (London: Headley. 1916. Pp. 157. 2s.)

RADFORD, G. *State services. The case of state management of agriculture, banking, public houses, etc.* (London: Smith, Elder. 1916. 3s. 6d.)

VANDERVELDE, E. *La Belgique envahie et le socialisme international.* (Paris: Berger-Levrault. 1916. 3.50 fr.)

Industrial profit sharing and welfare work. (Cleveland, O.: Chamber of Commerce. 1916. Pp. 85.)

Statistics and Its Methods

NEW BOOKS

DOLL, E. A. *Anthropometry as an aid to mental diagnosis; a simple method for the examination of sub-normals.* (Vineland, N. J.: Training School. 1916. Pp. 91. 75c.)

GUILFOY, W. H. and WYNNE, S. W. *An analysis of mortality returns of the sanitary areas of the Borough of Manhattan for the year 1915.* (New York: Dept. of Health. 1916. Pp. 62.)

WILBUR, C. L. *The federal registration service of the United States: its development, problems, and defects.* (Washington: Gov. Prtg. Off. 1916. Pp. 86.)

The Canada year book, 1915. (Ottawa: Minister of Trade and Commerce. 1916. Pp. xvi, 707.)

New tables are given showing grain prices and ocean freight rates over a period of years and the number of farm livestock in the principal countries of the world.

Ninth annual report of the statistics of municipal finances for city and town fiscal years ending between November 30, 1914, and March 31, 1915. (Boston: Mass. Bureau of Statistics. 1916. Pp. xxxi, 301.)

Occupations of the people. Fifth census of Canada, 1911, vol. VI. (Ottawa: Dept. of Trade and Commerce, Census and Statistics Office. 1915. Pp. 469.)

Statistical abstract of the United States, 1915. (Washington: Bureau of Foreign and Domestic Commerce. 1916. Pp. 749.)

Tentative program of the Bureau of the Census: 1916-1919. (Washington: Bureau of the Census. 1916. Pp. 14.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

REPORT ON TRADE AND TARIFFS IN BRAZIL, URUGUAY, ARGENTINA, CHILE, BOLIVIA, AND PERU (Washington, Federal Trade Commission) contains nearly 250 pages of information gathered, primarily, for the representatives of the United States at the meetings of the International High Commission held at Buenos Aires early in 1916. In assembling the data for this report, the agents of the Federal Trade Commission were mindful of the needs of others who might be interested in the various phases of the trade relations between the United States and South America, so that the volume might serve a much wider use than that for which it originally was intended. After pointing out the advantages long enjoyed by European financial and commercial interests in Latin American countries, due to such factors as tradition, sentiment, and the liberal investment of European capital in railroads, port works, municipal improvements, steamship lines, mining, and other industries, there is discussed the general problem of trade development between the United States and South America. It is pointed out that improvement in present conditions may be effected by the combined efforts of American financial and commercial interests, on the one hand, and governmental activity, on the other. Though the report is well-balanced, the countries which, as might be expected, come in for the most extensive treatment are Brazil, Argentina, and Chile. The information which furnished the basis of the report was collected on the ground by representatives of the Federal Trade Commission who visited the customs houses, studied the routine work of the officials, examined the various papers and documents covering shipments and receipts of goods, etc. Though less extensive and comprehensive than the report of Frank D. Rutter of the Bureau of Foreign and Domestic Commerce on *Tariff Systems of South American Countries* (see AMERICAN ECONOMIC REVIEW, Dec., 1916, p. 952), it covers in part at least the same general ground as the latter.

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Recent publications of the Bureau of Foreign and Domestic Commerce are:

In the Special Agents Series:

No. 121, *Artificial Dyestuffs Used in the United States* (pp. 254), by Thomas H. Norton.

No. 124, *Cotton Goods in British India: Part 1, Madras Presidency* (pp. 50), by Ralph M. Odell.

No. 125, *Markets for Agricultural Implements and Machinery in Argentina* (pp. 86), by Frank H. von Motz.

In the Miscellaneous Series:

No. 39, *Peruvian Markets for American Hardware* (pp. 64), prepared under the supervision of the United States commercial attaché at Lima, Peru.

No. 41, *Markets for American Hardware in Chile and Bolivia* (pp. 190), prepared under the supervision of Verne L. Havens.

No. 42, *Australian Markets for American Hardware* (pp. 105), prepared under the supervision of William C. Downs.

No. 43, *Markets for American Hardware in Argentina, Uruguay, and Paraguay* (pp. 64), prepared under the supervision of Albert Hale.

No. 45, *Exporting to Australia: Practices and Regulations to be Observed by American Shippers* (pp. 29), by Philip B. Kennedy.

No. 47, *Brazilian Markets for American Hardware* (pp. 89), prepared under the supervision of Lincoln Hutchinson.

In the Tariff Series:

No. 35, *Commercial Travelers in Latin America* (pp. 42), by L. Domeratzky.

The *Annual Report of the Chief of the Bureau of Foreign and Domestic Commerce* (Washington, 1916, pp. 97) devotes attention to the prospects for American trade after the restoration of peace. An account is given of trade extension work and the activities of commercial agents abroad; and it is noted that a constant effort is being made to secure persons properly qualified for foreign and domestic commerce appointments.

The *Annual Report of the Federal Trade Commission, 1916* (Washington, 1916, pp. 63) has seven pages devoted to unfair competition and violation of the Clayton act. Particular reference is made to the commission's activity in securing uniform accounting on the part of merchants and manufacturers. For this purpose two experienced accountants and a small staff were engaged during the year. Specific investigations have been undertaken along the following lines: co-operation in the American export trade; trade and tariffs in South America; pipe-line transportation of petroleum; fertilizer industry; gasoline prices; beet-sugar industry; lumber industry; resale price maintenance; trade associations; and Mexican sisal hemp. Preliminary work has also been begun on the anthracite coal, bituminous

coal, and news-print industries. The investigations relating to co-operation in export trade, trade and tariffs in South America, pipe-line transportation, and Mexican sisal hemp were completed.

Pamphlets received from the Federal Trade Commission are: *Fundamentals of a Cost System for Manufacturers* (Washington, July 1, 1916, pp. 31); and *A System of Accounts for Retail Merchants* (July 15, 1916, pp. 19).

The Department of Agriculture, in Bulletin No. 394, presents *A Survey of Typical Coöperative Stores in the United States* (Washington, Nov. 3, 1916, pp. 29) prepared by J. A. Bexell, dean of the School of Commerce of the Oregon Agricultural College, Hector McPherson, of the same institution, and Mr. W. H. Kerr, of the Department of Agriculture.

The Merchants Association of New York has issued a report on the *Webb Bill* urging its immediate passage (New York, 1917, pp. 20).

A pamphlet printed by the National Shawmut Bank on *The Port of Boston* (Boston, 1916, pp. 57) contains a bibliography of six pages on port administration and foreign trade. There are interesting charts designed to show the position of Massachusetts in manufacturing and commercial activity in various lines of industry as compared with other states.

Corporations

THE PROGRESS OF FEDERAL VALUATION. On March 1, 1913, Congress enacted the law directing the Interstate Commerce Commission to investigate, ascertain, and report the value of all property owned or used by every common carrier subject to the provisions of the Interstate Commerce act. The broad requirement of this law has proven to be a stupendous task to both the commission and the railroads. The necessity for concentration of effort and of coöperation between the government and the carriers was manifest from the outset. The Interstate Commerce Commission promptly organized a department of valuation, with former commissioner Charles A. Prouty as director. The railroads also organized a bureau, known as the Presidents' Conference Committee, subdivided into three geographical groups, but with a centralized administration under the secretaryship of Thomas W. Hulme, real estate agent of the Pennsylvania railroad.

Because of the seriousness and the magnitude of the work, progress in outlining definite policies and procedure has been exceeding slow. Many conferences between representatives of the commission and of

the railroads have been held, with the result that standard methods regarding a few matters have been established. But the important fundamental valuation problems have not yet been worked out, notwithstanding that actual engineering appraisals have been under way during three years.

Considerable delay was experienced in organizing and conducting the field work of valuation on a large scale. To accomplish its task, the commission divided the whole country into five districts, each embracing in the neighborhood of 50,000 miles of line. Each district is in charge of an engineer with an entire staff. The government forces in each district are further subdivided into three sections—Engineering, Land, and Accounting—each conducting independent investigations under the centralized organization of the Division of Valuation. At the present time there are about one hundred parties in the field, covering some 2,000 miles of track per month. On January 1, 1917, it was estimated that field surveys have wholly and partially covered approximately 95,000 miles, or not more than a third of the total railroad mileage of the country. It is expected that 50,000 miles of road work will be covered annually and that surveys and inventories of all lines will be completed some time in 1920. Broadly speaking, the commission through its field and office organization is endeavoring to compile the so-called “three cost” figures; *the cost-of-reproduction-new, the cost-of-reproduction-less-depreciation, and original-cost-to-date*. Important and detailed information is also gathered regarding each company’s corporate and financial history.

In addition to data collected by its own forces the commission, through its valuation orders, has required directly from the carriers information on various matters. The character of the information desired may be gathered from the following list of the most important valuation orders issued thus far:

Valuation Order 1 (the so-called “Map Order”), modified and supplemented by Valuation Orders 5 and 6.—Provides specifications for maps and profiles of railroad lines, which govern maps and profiles filed with the commission.

Valuation Order 2, as modified by Order 10.—Requires the filing of schedules of abandoned property, showing original cost, date of abandonment, and disposition and present status of the property.

Valuation Order 3.—Provides that records shall be kept and reports shall be made to the commission as to all extensions, improvements, or other changes in the physical property of every common carrier after June 30, 1914, classified by states, and showing in detail units and quantities of material and labor.

Valuation Order 4.—Requires an annual inventory of material and supplies to be made and kept.

Valuation Order 7.—Requires the filing of schedules of land showing original cost, and classifying as held for carrier purposes or purposes other than those of a common carrier.

Valuation Order 8.—Requires the recording and reporting of a register of equipment (rolling and floating, work and shop and other machinery) showing original cost to date.

Valuation Order 11.—Requires the filing of inventories of corporate records, documents and papers, showing location and custodian.

Valuation Order 12.—Schedules of industrial tracks to be filed.

Valuation Order 13.—Requires the making and filing of schedules and inventories of quantities, units, and classes or kinds of property in roadway or track, bridges, buildings and all other structures, signals, interlockers, telegraph and telephone lines, electrical apparatus, and any and all fixed physical property except lands and equipment.

Valuation Order 14.—Schedules to be filed showing important purchases made and net prices paid by steam railroads for material of a large number of enumerated classes, and also rates of compensation for labor.

Valuation Order 15.—Requires schedules pertaining to privileges given and leases made by steam railroads.

Valuation Order 16.—Requires schedules of all aids, gifts, grants, and donations.

Valuation Order 20.—Requires statements showing the corporate history of the common carrier appraised and of its predecessors, and the chain of title.

For the purpose of considering the unsettled and disputed questions connected with the railroad valuation, the Interstate Commerce Commission has held several formal hearings at which representations of the carrier, of the states, and of the Division of Valuation of the commission participate. Briefs and oral arguments were submitted with reference to questions such as the methods of determining reproduction cost and original-cost-to-date; the determination of depreciation and appreciation, proper methods of land valuation, engineering and other overhead costs and the intangible values ("other elements of value") as designated in the valuation act.

There have been no rulings of the Interstate Commerce Commission itself upon any of the important issues raised in the work of appraisal. However, the work already done by the Division of Valuation in organization, in the field, in pricing, in accounting, and in historical research, though necessarily slow, has covered a wide territory and for its proper fulfillment may soon require rulings as to procedure and policy. The statute requires that when a tentative valuation has been reached notice of the valuation so placed upon the various classes of

property shall be served upon the Attorney General of the United States, the governors of the states in which the property is situated, the carrier itself, and such other parties as the commission may designate. Thirty days are allowed interested parties in which to object to the tentative valuation as fixed by the commission. In view of the fact that tentative valuations of several small railroads have already been reported, and that the legal requirements regarding the filing of notices and protests has been made, the commission cannot very long withhold its decisions upon the controverted questions which have arisen. It is a safe assumption that these questions will probably not be finally determined until after long and extended litigation culminating in the United States Supreme Court.

The first tentative physical valuation report of the Valuation Division of the Interstate Commerce Commission was given out October 23, 1916. It covered the Texas Midland Railroad, known as the Hetty Green road, comprising 111 miles, wholly within the state of Texas. After nearly four years of work with this property it was tentatively determined that reproduction cost was \$3,627,313 and the cost-of-reproduction-less-depreciation was \$2,772,726. The capitalization of the company was stated as \$2,112,000 or less than reproduction cost. The total book investment in road and equipment is reported as \$3,474,491 although it is admitted that notwithstanding the railroad was constructed within the last decade no reliable figures of actual cost could be furnished.

The next tentative report to be completed covered the Atlanta, Birmingham and Atlantic Railroad, a system of 444 miles of single track in Georgia and Alabama. The cost-of-reproduction-new was computed at \$26,446,411 and the reproduction-cost-less-depreciation at \$12,700,223. The capitalization was stated at \$59,500,000. The present corporation (a reorganization of the former bankrupt company), however, is capitalized at \$39,000,000. No estimate was made of the original-cost-to-date although the officials of the railroad furnished the evidence that in addition to securities issued for property, \$38,000,000 in cash was obtained from the proceeds of the sale of securities issued and expended for the construction of new lines and for the acquisition and rehabilitation of other lines now part of the system.

Another report of tentative valuation, that of the New Orleans, Texas and Mexico Railroad, recently published gives a reproduction-new valuation of \$8,865,636 and original-cost-to-date of \$12,194,231,

and contrasts this with a capitalization of \$41,000,000. However, the commission's tentative estimate of cost-of-reproduction covers only the railroad owned by the New Orleans, Texas & Mexico, whereas its capitalization includes an investment of \$28,000,000 in securities of three other railroads in Texas.

A fourth tentative report comprises the Kansas City Southern System, having 841 miles running from Kansas City, Missouri, to the Gulf. The cost-of-reproduction of this system is placed at \$47,015,814 and the reproduction-cost-less-depreciation at \$39,867,092. These figures are regarded as extremely low in view of the fact that since 1900 about \$20,000,000 of new capital was applied in physical improvements.

In the valuation of the Kansas City Southern and the Atlantic, Birmingham & Atlantic it was reported that original-cost-to-date could not be definitely ascertained. This conclusion is given notwithstanding that the lines valued are of comparatively recent construction, and that the commission's accountants (particularly in the case of the Kansas City Southern) were given access to complete records of construction vouchers. Moreover, no estimates, data, or findings were reported with reference to "other elements of value." Two of the companies submitted claims for such intangible values. The "original and present cost of condemnation of land and damages or of purchase in excess of such original cost or present value," as required by the language of the valuation act, were not reported. The Division of Valuation of the Interstate Commerce Commission seems to have prepared its estimates solely on engineering appraisals of actual physical property in use, leaving to the commission itself or to the courts the determination of other matters, nearly all of which are in dispute.

The railroad companies which have been served with notices of the tentative valuation of their properties have filed, as required by law, written protests against the results of inventories submitted to the commission. The commission itself announced that it has not yet finally passed upon the many questions relating to the methods and principles involved, but that it will do so when these matters are presented to it, along with the carriers' objections, for definite consideration in the actual valuations. Its decisions in these cases will then serve as a basis for its future work.

The protests of the carriers against the tentative valuation reports thus far represented are based mainly on the following contentions:

1. The valuations are incomplete in that they deal merely with engineering appraisals. They exclude many "costs" incurred in the

construction and development of the property which would again be incurred in the reproduction of these properties under any reasonable program of reproduction.

2. Unwarranted deductions from value have been made on account of depreciation, the carriers contending that depreciation is a matter of maintenance expense, that as long as a railroad property is efficiently and adequately maintained through repairs and renewals there is no depreciation.

3. No allowances have been made for abandoned property, although in many instances abandonments are as much the cost of the ordinary American railroad as is the cost of preliminary surveys in originally locating the line or the false work in building the bridges, and other expenses incurred in developing and operating a railroad plant.

4. The right-of-way values as determined by the Division of Valuation do not constitute the "reproduction cost" or the "present value" thereof since no allowances have been granted for cost of acquisition, severance damages, destruction or removal of buildings and the like, the commission merely taking the bare acreage value of adjacent lands and applying this unit value to the acreage of the railroad right-of-way and terminal real estate.

5. Nothing has been added to reproduction value to represent the intangible or so-called "other elements of value" which the valuation act requires to be separately inventoried.

6. The working capital or quick assets of the carriers has not been inventoried, although such assets are an integral part of the railroad property and are essential to the operation of the railroad.

Several hearings have already been held before the Interstate Commerce Commission in which oral protests against tentative valuations have been presented by both the railroads and state commissions. The only result thus far has been the registering of more conflicting theories and wider diversities of opinion. There is now dispute as to whether the commission should prepare final valuations of the properties of the carriers, it being contended by a representative of the state commissions that the valuation act gives no authority to fix final value. Commissioner Clements stated that the Interstate Commerce Commission has tentatively arrived at this conclusion, although he asserted that it is still open to argument on this point.

It is doubtful whether these disputed matters will be definitely settled for many years. The bare inventorying of the physical properties

is not expected to be completed during the coming three years. The difficult task of compiling and condensing the data, and the application thereto of unit prices, overhead expenses, engineering costs, and other elements of value, will require a much longer period. In the meantime, the expense of the work both to the railroads and to the government is tremendous, and as the work goes forward graver doubts are expressed of the ultimate utility of the whole undertaking.

A. M. SAKOLSKI.

THE CAPITALIZATION OF PUBLIC UTILITY CONSOLIDATIONS. What is to determine the amount of securities properly issuable, in the case of the consolidation of two or more public utility companies? Is it sufficient that the public utility commission or regulating body simply require that the amount of securities issued by the new corporation shall not exceed the outstanding capital stock and debt of the companies to be consolidated, or should it go farther and insist that the securities to be issued by the new corporation shall rest upon an actual valuation of the property, regardless of the existing capitalization? This question has recently been confronted by several public utility commissions; and, in view of the movement for consolidation among utility corporations, it is likely that it will present itself frequently in the near future.

Before the establishment of government control over the issuance of public utility securities, consolidation was often used to inflate capitalization. It was frequently felt that it would be easier for a new corporation to float an excessive issue than for any of the separate companies to do so. The stockholders in the merged companies were frequently glad of the opportunity of exchanging their shares for a larger number of shares in the new company, which in turn might be unloaded upon the investing public. But in many states which have seriously undertaken to regulate securities this practice is no longer possible. In these states the possibility of increasing the capitalization through consolidation beyond that of the consolidated companies, has been eliminated by the provisions in the state laws. For example, in Ohio¹ the law provides that the capital stock and aggregate debt of corporations formed by the merger or consolidation of two or more corporations shall not exceed the sum of capital stock and aggregate debt of the merged companies, and any additional sum actually paid in cash. Massachusetts² has the same provisions for gas and elec-

¹ Ohio, Laws of 1911, No. 325, sec. 62.

² Massachusetts, Acts of 1906, ch. 382, sec. 1.

tric utilities. The laws of Maryland,³ Nebraska,⁴ New York,⁵ Illinois,⁶ and Indiana,⁷ contain similar provisions regarding the capital stock, although they do not include the debt. But in many of the states the subject of capitalization of consolidations is not specifically covered by the laws, and the principles to be applied remain to be worked out by the commissions.

The principle that the capitalization of a corporation formed by consolidation of two or more corporations should not, by reason of such merger, exceed that of the consolidated companies, is unassailable. There is nothing in the mere act of consolidating which should give justification for increasing the aggregate capitalization. But does this principle go far enough? In the laws above mentioned, the provision is that the capital stock, or the stock and debt, of the new corporation shall not exceed that of the consolidated companies. But the commissions in practically all the states are given discretionary power as to what the amount of stock or securities issued shall be. Another question therefore presents itself. Is not the consolidation of companies which are already over-capitalized, an advantageous and appropriate time for the public authorities to squeeze out some of the water which has been injected in previous years? It is maintained by some that a corporation which represents a consolidation of other companies, and which is to come into possession of the properties of the consolidated companies, should be treated exactly as any new utility enterprise, and that the amount of capitalization to be allowed should be determined solely by the actual value of the property owned or to be acquired by the consolidated corporation. The Missouri Commission has applied the principle that over-capitalization must be eliminated before permission will be given to form a consolidation. In describing its action upon the petition of the Missouri and Kansas Telephone Company, the commission says:

In the consolidation of the properties of the Missouri and Kansas Telephone Company with the properties of the Home Telephone Company of Joplin, the Commission permitted the consolidation to be made on detailed appraisals of telephone valuation engineers of said properties. In the examination the Commission ascertained that at least \$100,000 of the stock of said Home Telephone Company had been issued without the actual cash having been paid for same, and the Commission permitted the consolidation upon condition that

³ Maryland, Laws of 1910, ch. 180, secs. 27 and 34.

⁴ Nebraska, Acts of 1909, ch. 108, sec. 1.

⁵ New York, Laws of 1910, ch. 480, secs. 55, 69, and 101.

⁶ Illinois, House Bill 907, 1913, sec. 22.

⁷ Indiana, Public Utility Act, § 92.

the Home Telephone Company would surrender to its board of directors \$100,000 of said stock as 'watered' and cancel same and certify that fact to the Commission, which was fully complied with before the order of the Commission became effective permitting the consolidation of said two telephone companies.⁸

On the other hand, the Arizona, Ohio, Maryland, and Kansas public utility commissions, and the Massachusetts Gas and Electric Light Commission, are on record as granting applications for the issuance of securities by a consolidation, without conducting any valuation of the properties owned by the separate companies, apparently justifying their action upon the ground that the capitalization of the properties was not increased by the consolidation.

The Arizona commission, in granting its consent to the El Paso and Southwestern Railroad Company to consolidate with five smaller companies, imposed the following restriction:

provided that the entire issue of the capital stock and bonded indebtedness of such consolidated company issued in lieu of the present outstanding stock and bonded indebtedness of such separate companies so proposing to consolidate shall not exceed, without the further consent of the commission, the present total amount of all such capital stock and bonds issued by each of said companies, respectively, and now outstanding.⁹

The Massachusetts Gas and Electric Light Commission recently granted its approval to the consolidation of the Turners Falls Power and Electric Company with the Turners Falls Company, both engaged in supplying electricity. The former company was to issue 25,000 shares, par value \$100 each, to be exchanged share for share for the entire capital stock of the Turners Falls Company, the latter when exchanged to be cancelled. In granting this petition the commission states: "By reason of the proposed consolidation the facilities for furnishing and distributing electricity will not be diminished, and no increase will be effected in the aggregate capital stock, or in the aggregate debt of the two institutions."¹⁰ Apparently no consideration was given to the actual value of the properties, aside from pointing out that the "book value" of the properties in each case exceeded the outstanding liabilities. The same course of action was followed by the Kansas commission in permitting the consolidation of the Salina

⁸ In this case no opinion was written, but the order entered was apparently founded upon an extensive knowledge of the affairs of the company. *Second Annual Report, Missouri Public Service Commission*, p. 85.

⁹ *First Annual Report, Arizona Corporation Commission*, p. 823.

¹⁰ *Public Utility Reports Annotated* (Lawyers Coöperative Pub. Co., Rochester, N. Y.), 1915. B., p. 61.

Telephone Company with the United Telephone Company. The United Telephone Company was to assume all the obligations of the Salina Company and to exchange its stock share for share for that of the Salina Company, which was then to be cancelled. No valuation of the properties was conducted, and no reference to the value of the properties appears in the decision.¹¹ Similar actions had been taken by both the Maryland¹² and the Ohio¹³ commissions.

In a recent decision of the Illinois Public Utilities Commission, involving the consolidation of the Illinois Northern Utilities Company, the Freeport Railway and Light Company, and the Tri-County Light and Power Company, two conflicting points of view regarding the capitalization of consolidations are expressed.¹⁴ The majority of the commission take the position that a consolidation should be permitted to issue capital stock and obligations, dollar for dollar, to the amount of the outstanding issues of the companies forming the consolidation; but the minority insist that no securities should be permitted to be issued, except after a valuation of the property. The conflicting points of view are more sharply defined than in any other commission decision up to the present time dealing with this subject. The majority justified its action upon the ground that the Illinois statute simply forbids the commission from permitting the capitalization of consolidations to exceed that of the companies consolidated, but that the commission is not required by the statute to conduct a valuation; that no one would be benefited by reducing the existing capitalization; that if the commission should withhold its approval and thereby prevent the consolidation the same amount of stock would be outstanding; and that a public utility commission cannot properly deal with, or endeavor to eliminate, over-capitalization which has come about prior to the establishment of governmental control of security issues. The majority therefore held that the petition for the consolidation should be granted, and that the exchange of securities might be made, the capital stock and the bonded indebtedness of the consolidated corporation to be the same in par amount as that of the corporations to be consolidated. However, it was provided that each of the certificates of stock of the consolidated corporation should contain a statement to the effect that

¹¹ *American Telephone & Telegraph Co. Commission Leaflet No. 29*, p. 793.

¹² *Ibid.*, No. 16, p. 600.

¹³ *Annual Report, Ohio Public Utility Commission*, 1913, p. 106.

¹⁴ *Public Utility Commission of Illinois—Opinions and Orders*, No. 7, July, 1916.

the issue had been authorized by the commission, "without investigation by said commission of the value of the assets of said corporation." The dissenting commissioners contend that "the issuance of any stock without a determination of the value behind the stock is contrary to the spirit and purpose of the law, and contrary to public policy," and insist that the commission should exercise its privilege to conduct an evaluation of the property before permitting the issuance of securities.

The issues involved in this problem are much broader than the mere question of the proper capitalization of consolidations. The fundamental question is, What is to be the attitude of the state toward corporations which were already over-capitalized at the time of the establishment of government control of security issues? Is the state to endeavor to squeeze out such past over-capitalization, or is it simply to endeavor to prevent subsequent inflated issues? The same question arises not only in connection with petitions for consent to issue securities in consolidation cases: it likewise presents itself every time an over-capitalized utility petitions for consent to issue additional securities even for purposes which are proper, and in proper amounts. For if the state is to adopt the general policy of endeavoring to undo past over-capitalization, an over-capitalized concern cannot be permitted to make new issues until it first brings the value of its existing property up to the amount of its outstanding capitalization, or scales its capitalization down to correspond to the value of its property. Most of the commissions have taken the position that over-capitalization which came into existence prior to the establishment of commission control will be no bar to the issuance of new securities, when such new securities are for purposes properly chargeable to capital account and are issued for purposes properly chargeable to capital account and are issued in proper amounts. The Ohio commission says: ". . . the commission has held to the idea that past derelictions of duty or offenses involving even moral turpitude should not be regarded as a bar to future honest action, although the honest superstructure may of necessity be compelled to rest upon a dishonest foundation."¹⁵ This statement may be regarded as fairly typical of the attitude of all the commissions except those of Massachusetts and Texas. The course here indicated seems to be the reasonable one for regulating bodies to follow, for otherwise the issuance of securities for making needed extensions, betterments, and improvements, would be rendered difficult and sometimes almost impossible.

¹⁵ *Report of Public Service Commission of Ohio*, 1912, p. 4.

The situation seems to be analogous in the case of securities to be issued by a consolidation. To require the capitalization of a consolidation to be scaled down to correspond to the actual value of the properties involved obviously would mean in many cases that the consolidation would not be effected, and that, therefore, the community would be deprived of the advantages arising from unified operation, such as more economical financing, reduction in the cost of operation, and more efficient management. There is good reason to think that consolidation, especially of the smaller local utilities, will frequently lead to important gains and savings—in the benefits of which the public may share, where there exists a regulating body with wide and ample powers. Therefore a policy which would discourage such consolidation would be unfortunate indeed.

Further, to require a consolidation to limit its capital stock and bonded debt to the actual value of the property involved (if the state is not under obligation to protect authorized securities) would seem to be as retroactive as to require a corporation to wipe out all its past over-capitalization before permitting it to make new issues for betterments or improvements. If there be over-capitalization, it came about in most cases when such practices were not illegal, and when the utilities in making excessive issues were only engaging in practices which still widely prevail in other lines of business. For the state now to require the elimination of a portion of this capitalization, the issuance of which was perfectly legal at the time it was issued, would indeed seem to establish an *ex post facto* practice. True, it has frequently been recognized by regulating bodies that insolvency and reorganization offer a proper time to apply the pruning knife to fictitious capitalization. The New York commissions have insisted that in reorganization proceedings, a corporation in issuing its new securities for old is to be treated as a new enterprise, and that the amount of securities properly issuable is to be governed by the actual value of the assets, regardless of previous capitalization. In this position it has been followed by the Missouri, California, and other commissions. But a consolidation is essentially different from a reorganization. A reorganization, generally speaking, is brought about because the capitalization is so excessive that the fixed charges cannot be met. Such a situation, at least in most cases, justifies a scaling down of those charges or of the total capitalization, in the public interest. But a consolidation may represent a merger of separate companies, each of which is prosperous and successful, and each of

which beyond all question is able to meet its fixed charges. Under such circumstances there does not appear to be the same justification for the state to insist upon a reduction in the capitalization.

The above reasoning all rests upon the assumption that a state is not under obligation to guarantee a return, or to protect with any particular rate of return securities the issuance of which it may have approved, through its regulating body. While this is the position of nearly all the commissions,¹⁶ and while provisions to this effect are actually contained in the public utility laws of many states, this principle cannot be said to be indisputably established; for up to the present the courts have not been called upon to pass directly on the question as to whether a state, in the making of rates to the consumer, is under obligation to establish such rates as will provide a fair return, or any return, upon securities the issuance of which it has specifically approved. Obviously the reasonable assumption is that the state is under no such obligation. The state does not guarantee securities to investors when it approves them. With governmental regulation of securities, as without it, presumably rates will continue to rest upon the actual value of the property. But if the states are to be held responsible to permit a fair return on securities bearing their stamp of authorization, then the whole situation regarding the capitalization of consolidations is changed. It was pointed out in the Illinois decision, above referred to, that whether or not the petition of the consolidated company were granted, the same amount of securities would be outstanding. But it is important to note that the outstanding securities issued before the establishment of commission control do not carry with them the authorization of the state; whereas, after consolidation under commission control the whole new issue carries the authorization and approval of the state. If the capitalization of the constituent companies is to be the basis for the capitalization of the consolidated company, and if the authorization of the state indicates that securities are to be protected or guaranteed, or even are to be a factor of any importance in rate making, then utility companies, in so far as they are over-capitalized before consolidation, will materially strengthen their position by the mere process of consolidation, and the public to the same extent will lose. It is, therefore, evident that if state authorization of securities means state protection for them in rate making, the

¹⁶ The only commission which has definitely announced its intention to protect securities authorized by it is the Massachusetts Public Service Commission. See "Two Rate Decisions of Importance," by the author, *Quarterly Journal of Economics*, August, 1915.

petition of a consolidation to issue its securities must be treated exactly as the petition of a new enterprise. In other words, the amount of securities properly issuable must depend upon the value of the property. Further, if all securities approved by the state are to be protected by it in regulating rates to the consumer, insistence upon an equivalence between the capitalization of a consolidation and the value of the property involved cannot be regarded in any sense as retroactive. For the new securities authorized by the commission or the regulating body possess an entirely different character from that of the old securities. The substitution of the securities of the consolidation for those of the consolidated companies to the same aggregate amount, is not merely a preservation of the *status quo*, but it becomes a substitution of state-protected securities for those which are not so protected.

In view of the lack of authoritative judicial determination as to the extent of the obligation of the state towards securities approved by it, it is difficult to state what should be the attitude of regulating bodies regarding the issuance of securities by consolidations. It is surprising that this issue has not yet been fought through the courts. Final determination of this question is much to be desired. Such determination would materially simplify not only the question of the capitalization of consolidations but also the whole problem of public control of utility securities.

RALPH E. HEILMAN.

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A new edition of *The Federal Anti-Trust Laws with Amendments* has been issued (Washington, Gov. Prtg. Off., pp. 105, 10c). This includes a list of cases instituted by the government and citation of cases decided thereunder.

Two recent issues of the Bureau of Railway Economics are *Comparative Railway Statistics, United States and Foreign Countries, 1913* (Washington, Miscel. Series No. 25, 1916, pp. 78) and *Statistics of Railways, 1905-1915, United States* (No. 26, pp. 57).

The bulletin of the American Railway Engineering Association for October, 1916, contains a *List of References on Valuation of Steam Railroads*, prepared by the Bureau of Railway Economics (Chicago, pp. 147).

The *Annual Report of the Department of City Transit of Philadelphia for 1915* (pp. 840) includes elaborate charts showing rapid transit development, having particular reference to the distribution of passengers.

The *Fourth Annual Report of the Public Service Commission of Massachusetts* (Boston, Jan., 1917, pp. cxv) gives special attention to the street railway question and in particular to the demands made by certain companies to obtain an increase in rates.

Labor

ARBITRATION AWARDS UNDER THE ERDMAN AND NEWLANDS ACTS.—In May, 1916, the United States Board of Mediation and Conciliation was directed by the Senate to prepare a report on the effects of the various arbitration awards made under the Erdman and Newlands acts upon the wages and working conditions of railroad employees. The report transmitted in response to this request has since been published as a Senate document. (*Report of the United States Board of Mediation and Conciliation on the Effects of Arbitration Proceedings upon Rates of Pay and Working Conditions of Railroad Employees*. Prepared under the direction of the Board by W. Jett Lauck. Senate Document No. 493, 64 Cong., 1 Sess. Washington, Government Printing Office, 1916, pp. 608.) The report is intended to show primarily how the award in each case compares with the demands of the employees and, so far as the data could be secured, the extent to which wages were advanced and working conditions improved by each award. A "history" of each case is also given, but this is little more than a bald recital of names and dates. More than one set of facts of vital significance in the working of the Newlands act are omitted. The arguments of the respective sides are given in summary for the last three regional arbitration cases under the statute; and in several cases, notably that of the conductors and trainmen versus the eastern roads in 1913, the reasons stated by the board for its decisions are given. Several railway arbitrations carried on outside the statute, the most important of which is that of the engineers in eastern territory in 1912, are also included.

The report shows that thirteen cases were submitted to arbitration under the Erdman act. In the first of these, submitted in January, 1907, the award was only technically an arbitration award, as it merely embodied the terms of an agreement reached by the parties the day after the hearings were begun. Eight cases were reported as concluded under the Newlands act prior to June 30, 1915. Four of the twenty-one cases, two under each act, were regional arbitration cases. In all but three cases under the Erdman act and two under the Newlands act the federal mediators were obliged to choose the neutral member or members to complete the board, the members chosen by the parties

having failed to agree on the additional member or members. In all but a few cases, too, the arbitrator or arbitrators selected by one of the sides dissented on one or more items in the award.

As to the question of how the award compares in each particular case with the demands of the men, no exact quantitative answer can be obtained from the report. In nearly every case both the demands and the awards involve items which are so different in character that they are not commensurate. But even in the matter of direct wage demands it is impossible to tell in all but a few cases what proportion of the aggregate wage increase asked was actually granted. In a very few cases the board awarded a lump sum or a given percentage increase in the aggregate. For the most part, however, specific rates were demanded instead of specific increases, and specific rates were awarded; and for such cases the rates in existence before the award are not set forth with the completeness required for a quantitative comparison of the increases awarded with those actually asked. The percentages gained by each class of workers are given in some cases, to be sure, but in only two cases is the number of men in each class given. For example, in the accounts of the firemen's Eastern arbitration in 1913 and the engineers' and firemen's arbitration in the West in 1914-1915 the data given, although considerable, are insufficient for the desired comparison of the wage increases awarded with those demanded. In both cases the demands were for standard rates. The report gives many pages of detailed figures as to the rates on individual roads before and after arbitrations, but not all of the roads involved are fully covered in the wage returns in either case, and in neither is the classification of the locomotives in the returns the same as that followed in the demands and in the award. Moreover, a further difficulty stands in the way of estimating the actual wage increases awarded in the cases involving men in train service. This is the uncertainty as to what wage increases are indirectly involved in reductions in the number of hours taken as the basic day—that is, the number of hours after which overtime begins—for men whose runs are expected normally to exceed that number of hours.

Incomplete though the wage data available for comparisons are, enough is given to indicate that the arbitrators did not as a rule merely split the difference in arriving at their awards. It is clear that in many instances the men were given considerably more than half of what they asked—in a few instances all—and in other instances they were given only a small fraction of the increase demanded. In the firemen's arbitration in western territory in 1910, for example, the

men were awarded at least two thirds of what they requested where the demands were for specific increases. In many cases, too, the boards awarded much larger percentages of what was asked to some groups of workers than to others. There are instances of a board granting demands for some classes in full and much less than half of what was asked for other classes in the same award. Differentials are in some cases introduced in the award which do not appear in the demands, and there are instances in which requests for differentials of a standard amount are met by a refusal to establish any differential. Many of the rules demanded, too, are either granted outright or refused outright.

If the awards in the last three regional arbitrations held under the statute be studied as a group, a number of interesting and significant points appear. In all three cases one of the central demands is that for standardization of wage rates, hours, and working conditions; and it has met with a large measure of success. Where the boards have refused to award uniform rates it has been because of non-uniformities in the skill or effort required for the service rather than because of inequalities in the earning power of the roads. The boards have also consistently granted the men's contention that no existing wage rate or condition more favorable to the men than that awarded should be reduced or withdrawn as a result of the arbitration. On the other hand, the demand for time and a half for overtime in freight service (other than switching), first advanced in a regional arbitration in 1913, was refused both in 1913 and in 1915. In several other matters a later board has followed the ruling of an earlier one. This consistency is found also in the awards in the group of telegraphers' cases.

In the matter of general wage advances the boards seem to have been influenced chiefly by increases in the cost of living and the degree to which the amount of work or the responsibility placed on the worker had increased, if at all. A wage principle advanced by the engineers and firemen in the last regional arbitration should also be noted. The men asked that the engineers and helpers on electric locomotives should be paid the same rates as were asked for engineers and firemen on steam locomotives. They admitted that the work on electric locomotives was not so laborious, particularly in the case of helpers, but urged, among other things, that the "employees should be privileged to share in the productivity and economic advantages resulting from the introduction of labor saving and profit producing machines." The board declined

to grant the same standard rates for western territory for the electric locomotives as were granted for steam locomotives because "the electric service was in a state of development and there was no uniformity in practice," but it did award that on each road on which the electric locomotives were introduced the minimum day's rates in steam service should hold for the electric service also.

DAVID A. McCABE.

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Among the new issues of the United States Bureau of Labor Statistics are:

No. 193, *Dressmaking as a Trade in Massachusetts*, by Dr. May Allinson (Washington, Sept., 1916), which is to be noted at greater length in the next issue of the Review.

No. 202, *Proceedings of the Conference of Employment Managers' Association of Boston, Mass.: Held May 10, 1916* (p. 64). This is a verbatim transcript.

No. 206, *The British System of Labor Exchanges*, by B. Lasker (Oct., 1916, pp. 67), giving an account of the system which has been in operation since 1909. Apparently employment insurance has not lessened the work of labor exchanges. There has been a reduction in casual labor. It is believed that public opinion has been affected so that the public authorities have decreased the evil of seasonal unemployment.

The hearings, entitled *Threatened Strike of Railway Employees*, before the Senate Committee on Interstate Commerce, during the late summer, have been published as a Senate document (64 Cong., 1 Sess., No. 549, pp. 171).

The Law Reporting Company (74 Broadway, New York) has printed the *Proceedings, Brief, and Award in the Arbitration Case Between the Railroads and the Switchmen's Union of North America*.

The Hart Schaffner & Marx Labor Agreements (pp. 41), prepared by J. E. Williams, chairman of the board of arbitration, Sidney Hillman, president of the Amalgamated Clothing Workers of America, and Professor Earl Dean Howard, director of labor for Hart Schaffner & Marx, gives details of the arrangements which have been made by this firm for its employees. Articles by Professor Howard and Professor Wigmore are reprinted from the *Illinois Law Review* for March, 1916.

The Joint Board of Sanitary Control of the Cloak, Suit, and Skirt

and the Dress and Waist Industries of New York has summarized its experience in a pamphlet, *Six Years Work and Progress* (Union Sq., New York, June 31, 1916, pp. 31).

Bulletin No. 12 of the Minimum Wage Commission of Massachusetts is entitled *Preliminary Report on the Effect of the Minimum Wage in Massachusetts Retail Stores* (Boston, Nov., 1916, pp. 53). It is stated that the proprietors of the larger retail stores with few exceptions have accepted the recommendations of the commission. About January 1, 1916, when the commission's recommendations became effective, the wages of nearly 40 per cent of the employees concerned, employed in 900 stores, were raised; and in these stores the percentage of wage increases was 46. In the stores where the wages previously paid were not less than the minimum rates recommended, the percentage of wage increase was 20 per cent. The report includes the result of an investigation of the committee of the Boston Social Union which showed that the total earnings in the year 1916 of women and girls who were known to have lost their positions in consequence of the introduction of the minimum wage and have been compelled to seek other employment would be greater than would have been the case had they retained their positions in the retail stores at the wages they had been receiving. It is also stated that there is no tendency for the minimum wage to become a maximum.

The *Third Annual Report of the State Board of Labor and Industries* of Massachusetts (Boston, Jan., 1916, pp. 140) contains an appendix on an examination of minors by Dr. M. Victor Safford. All cotton manufacturing centers were covered by this examination; 679 boys between the ages of 14 and 18 were subjected to physical examinations. Tables are given showing, by ages and nationalities, height, weight, chest measure, and strength of grip. These results are compared with similar measurements made of other groups. The tables also show the diseases and defects found among these employees.

The Bureau of Accident Prevention of the Portland Cement Association of Chicago has made a *Study of Accidents for the year 1915* (Chicago, Sept. 1916, pp. 31). This is the third year during which this association has collected accident statistics from its member companies. Interesting charts are included.

The Women's Trade Union League of Massachusetts has prepared an argument for *The Forty-Eight-Hour Week for Women* (Boston, 919 Washington St., 1917, pp. 19). This is to serve as propaganda for the campaign for a reduction in the hours of labor for women.

The Mayor's Committee on Unemployment of New York City, as the result of its investigations, has published two pamphlets. *Planning Public Expenditures to Compensate for Decreased Private Employment during Business Depressions* (Nov., 1916, pp. 29) is a fuller report of an address by John R. Shillady, secretary of the committee, originally presented before the National Conference of Charities and Correction at Indianapolis, May 16, 1916. A summary is given of recommendations made by other commissions along the line suggested, including the experience of foreign countries. It is believed that several of the federal departments might make an advantageous shifting of expenditures over a period of years so as to secure larger outlays in periods of depression. Particularly is this true of expenditures by the Reclamation Service, and of expenditures for public buildings, rivers and harbors and good roads. It is also believed that railroads could take advantage of lean years when the price of materials is low to undertake a larger volume of improvements. The second report deals with *Dock Employment in New York City and Recommendations for its Regularization* (Oct., 1916, pp. 82, 50c). This is a much more exhaustive study and takes up questions of conditions of employment, wages and earnings, and collective agreements. A detailed scheme is added for centralizing and regularizing the employment of longshoremen.

Mr. Edwin V. O'Hara, chairman of the Industrial Welfare Commission of the State of Oregon, summarizes in a recent pamphlet the Oregon experience with *A Living Wage by Legislation* (Salem, 1916, pp. xxiii, 57). This contains the code of rulings of the Oregon commission, the text of the minimum wage law, and extracts from the Oregon supreme court decisions upholding the constitutionality of the act.

Money, Prices, Credit, and Banking

EDUCATIONAL CAMPAIGN CONCERNING COMMERCIAL PAPER. When the National Monetary Commission submitted its final report to Congress it included among the seventeen enumerated faults of our old banking system several concerning the commercial paper situation in this country. On the one hand it lamented the absence of an open discount market where, through the extensive buying and selling of good commercial paper, a high degree of fluidity of credit could be assured. But, even more fundamentally, it regretted the absence from our system of the kind of paper that could be dealt in in such a market.

In the Federal Reserve act with its amendments, Congress went as far as it could in providing a basis for the creation of an open dis-

count market. It authorized rediscount and open market operations by the federal reserve banks, it legalized acceptance practice in home as well as in foreign trade, and it gave the Federal Reserve Board broad authority in defining and in fixing rates of discount at the reserve banks for the different classes of paper. Moreover, after some experimenting, the Reserve Board, in a series of regulations, authorized differential rates of discount for the kinds of paper that could be used in rediscounting and that could be handled in open market operations. Yet despite a little advance that has been made every interested observer of the situation recognizes that we are far from creating an open discount market.

Two reasons in the main may be adduced in explanation of this fact. In the first place, the reduction of the required reserves by the Federal Reserve act itself and the great influx of the gold from abroad so eased the money situation that there was little inducement to the banks to concern themselves much about the possibility of rediscounting paper, and hence about the kinds of paper necessary for the purposes. In the second place, the relatively easy money situation and the facility with which credit could be obtained according to the old established methods afforded no stimulus to business men to study the weaknesses of accepted methods and to supplant them with new methods deemed more efficient. Hence it is recognized that the full possibilities of the federal reserve system can be realized only after American business men and bankers have given sufficient study to the domestic credit situation to induce them to work together for such readjustment of present-day methods as may be desirable.

With the object of stimulating the interest necessary for such a study, and, at the same time, with the purpose of supplying as much material bearing on the subject as can be brought together, two Philadelphia business men, Mr. John S. Jenks, Jr., and Mr. George H. Paine, have undertaken a broadly conceived educational campaign. As a first step there will be published some special newspaper editions dealing with the whole subject in as comprehensive a way as possible. Contributions are being prepared by such specialists in the academic field as Professors Seligman, Kemmerer, Patterson, Moulton, and Dean Kinley and by Dr. Willis, M. C. Elliott, Gilbert Montague, H. B. Paton, John G. Johnson, and Professors Sullivan, Brannan and Williston in the practical and legal fields. Studies will subsequently be made of credit practices in the various lines of trade; and through discussion and experimentation it is hoped not only to arouse interest but also to

assist the evolution of a form of credit procedure that will meet the requirements of sound principles, and at the same time insure the willing coöperation of American bankers and business men.

As a practical suggestion in this connection, Messrs. Jenks and Paine, with their associates, have devised a new form of commercial paper which aims to combine the advantages of the single-name promissory note with those of the trade acceptance, and which at the same time endeavors to meet the objections that are raised against these forms. Arrangements have been made for an extensive experiment in actual practice with the new form. A careful study of these experiments will be made and the results thereof will be duly published. It is hoped in this way to make a strong appeal to the practical business man, doubtful of purely theoretical arguments. At the same time it is hoped to learn from actual experimentation what the needs of American business as well as what its possibilities in the field of credit practice may be.

Those likely to be interested in this educational campaign, and desiring to be kept in touch with its main developments, are requested to communicate with the undersigned who has agreed to exercise general editorial supervision over it.

EUGENE E. AGGER.

Columbia University.

The Petersburg Land Bank Committee representing the Chamber of Commerce of the City of Petersburg has printed the *Argument Presented to the Federal Farm Loan Board for the Establishment of a Federal Land Bank at Petersburg, Virginia* (Oct., 1916, pp. 78, maps). This contains a discussion of the factors that must determine farm loan needs and the reasons why a land bank should be located in Virginia and more specifically in Petersburg. There are several statistical charts showing the farm mortgage debt of the proposed federal land district by states compared with Iowa. The maps show the railroad facilities of Petersburg, the geographical location of Petersburg with reference to the farm land in surrounding states, and also certain climatic phenomena pertaining to the district.

The Secretary of the State Banking Board of Nebraska, in the *Twenty-fourth Annual Report* showing the condition of building and loan associations of Nebraska (Lincoln, 1916, pp. 155), calls attention to the high rate of interest which borrowers of these institutions pay in that state. He believes that before long legislative interference will be necessary.

The Union Trust Company of Detroit, Michigan, has published a pamphlet entitled *Twenty-five Years of Humanities and Benefits* (1916, pp. 36) which gives a popular account of the work of a trust company.

The Massachusetts Commission on Cost of Living has made a brief report on *Anthracite Coal* (pp. 8). It is believed that the recent increase in the price in Massachusetts is by no means due entirely to policies of mining companies. There has been a lack of cars and labor. Railroad embargoes have played a large part.

The November Bulletin of the Department of Public Welfare of Chicago makes an exhaustive report on the *Loan Shark* in Chicago, prepared by Dr. Earle E. Eubank (Chicago, Nov., 1916, pp. 137). This describes the varieties of loan shark, the extent of the business, its technique, devices for getting business and making collections; legislation; and the substitute plans, such as the employers' loan fund, credit unions, the Morris plan, and the National Federation of Remedial Loan Associations.

The 1915-1916 *Supplement to Payne's Banking Laws of New York* has recently been published (75c.)

Among the reports of proceedings of bankers associations are to be noted:

The Proceedings of the Twenty-fifth Annual Convention of the Georgia Bankers' Association (Haynes McFadden, secretary, Chandler Bldg., Atlanta, 1916, pp. 180), which contains an address on "The federal reserve," by Charles S. Hamlin of the Federal Reserve Board.

Maryland Bankers Association Twenty-first Annual Convention (Charles Hann, secretary, Merchants-Mechanics' First National Bank, Baltimore, 1916, pp. 115).

Thirtieth Annual Convention of the Michigan Bankers Association (H. M. Brown, secretary, Ford Bldg., Detroit, 1916, pp. 149). This contains an address on "The Ford profit-sharing plan."

The Proceedings of the Twenty-second Annual Convention of the Pennsylvania Bankers Association (D. S. Kloss, secretary, Tyrone, 1916, pp. 302) contains the debate between the Pittsburgh and Philadelphia chapters of the American Institute of Banking on the question, "Resolved: That the closing of accounts on terms exceeding thirty days by acceptance is an improvement over the present method of merchandise extension" (pp. 148-181).

Public Finance

FINANCIAL STATISTICS OF STATES: 1915 is the title of a 125-page publication which was prepared under the supervision of Mr. Starke M. Grogan, chief statistician for statistics of states and cities, and issued by the United States Bureau of the Census in November, 1916. Perhaps the scope of this work is best expressed in the opening paragraph of the report itself.

The statistics herewith presented relate to the financial transactions of the 48 states for the fiscal year 1915 and of the financial condition of each state at the close of its fiscal year. For those states which closed their fiscal year on June 30 the data given pertain to the year beginning July 1, 1914, and ending June 30, 1915; for other states the data are of the twelve-month or fiscal period ending on a date between July 1, 1914, and June 30, 1915. The report presents statistics of (1) the total and per capita receipts of states from revenues, and from the principal classes thereof; (2) the total and per capita payments of states for expenses, interest, and outlays, and for each of the principal classes of expenses and outlays; (3) the total value of state properties; (4) the total and per capita indebtedness of states; and (5) the total and per capita assessed valuation of property subject to taxation.

In spite of the explanation in the above paragraph, to say that these statistics are for the fiscal year of 1915 is likely to be misleading to many because there are only twelve of the 48 states whose fiscal years end on June 30. Presumably this means that, for the other 36 states, these statistics are really for their fiscal years of 1914 instead of 1915.

A little more than half of the report consists of general tables which present the main analyses of receipts, payments, etc., mentioned in the paragraph quoted above. The rest of the report is text in explanation of these tables. Considerable addenda in the form of special tables are included in the text. Over a fourth of the text is devoted to the definition of the accounting terminology. Perhaps this much space for terminology is justified in order to secure definiteness and accuracy; and, furthermore, it may have some small influence in improving and in making uniform the accounting systems of some of the states.

To present, in really comparable form, the financial statistics of 48 different states, with all their diversities of organization, administration, and accounting is an exceedingly difficult, as well as a somewhat tedious and expensive, undertaking. The difficulties are great not only because the accounting systems are not uniform, but also because many of these systems are antiquated, inadequate, and misleading. This report undertakes to harmonize the data and to make them really comparable. The methods and principles followed in making this

harmonization, as outlined in the introduction, seem to be sound and, on the whole, to be as well adapted to secure the desired ends as could be expected or asked. There are certain numerated difficulties, however, which the report frankly admits that the Bureau of the Census is unable to overcome.

The analyses in the general tables are presented in good form and in as much detail as the size of the report permits. The text and the special tables therein modify or qualify the data of the general tables to such an extent that one takes a considerable risk in drawing any conclusions without first making a thorough study of a large part of the report. There are, also, some matters which one is likely to misunderstand unless familiar with the revenue systems of the states in question. This report fills an important gap in the statistics of government finance already published by the Bureau of the Census. Though not mentioned in the report itself, it is the reviewer's understanding that it was made in pursuance of the recommendations of the National Tax Association. Most or all of the data for a similar report for the following year have already been collected and it is to be hoped that such information will be made available annually hereafter. An even greater desideratum is that this and other agencies shall help to bring about improved accounting and fiscal practices in states and other governmental units.

ROY G. BLAKEY.

University of Minnesota.

THE COMPARATIVE COST OF STATE GOVERNMENTS. The present writer is especially interested in the census publication noted above because of the fact that for several months immediately preceding its publication he had been assisting the Minnesota Tax Commission in conducting an investigation or study of the comparative cost of government in a group of North Central states comprising Minnesota, Wisconsin, Michigan, Indiana, Ohio, and Iowa. This latter study covers the fiscal year of 1915 for each state except Ohio. On account of a change in the date of the fiscal year, Ohio had a 7½-month fiscal period, but no 12-month fiscal year of 1915; hence, the fiscal year of 1916 was taken in its case. Data for 1916, rather than for 1915, would have been used throughout had it been available. In the case of only three of the states mentioned above—Wisconsin, Michigan, and Iowa—are the data for the same year, 1915, presented in the census publication.

In most respects, the scope of our study is less comprehensive than that of the Bureau of the Census; and it does not undertake to make quite so many refinements in correction of the original accounting, or to put the data on an accrual rather than on a cash basis, as does the census study. Differences in amount of available time, assistance, and funds account for and justify most of these differences in treatment. Yet the results of the two studies are reasonably harmonious, in so far as we have compared them, and in so far as they refer to the same years and are otherwise comparable.

It is impossible to give here the results of our study in any detail. Perhaps the one result which most impressed the present writer is a more lively realization of the difficulties of making and presenting such studies in a way that will not be misleading to the average, and even to the careful, reader. We do not think these difficulties are peculiar to our investigation, we are sure that they were met by the census investigators, and they are characteristic of similar difficulties met in thousands of other investigations. In order to give a more vivid picture of these difficulties and to indicate their bearing upon how one should evaluate statistics it may not be amiss to cite a few concrete typical examples of the difficulties which we encountered in our study.

Chief among the causes of the difficulties are the differences in the accounting systems and the differences in the functions and activities of state departments, boards, and officials. The accounts of state auditors and treasurers are not kept primarily for the purpose of showing most clearly the current costs of government, but are concerned chiefly with appropriations and funds; that is, the chief aims of the accounting officers are to see that legislative appropriations are credited to, and that warrants drawn are charged against, their proper funds, and that these funds are not overdrawn. Though these are very legitimate and desirable functions for accounting officers to perform, accounts devised to secure these ends do not necessarily, in fact do not usually, show clearly the current costs of government. Transfers are made from one fund to another; sometimes the transfers are only one way, sometimes both ways, sometimes they are retransferred to other funds. A transfer appears as a payment or disbursement of one fund and as a receipt of another. It is obvious that the sums of the receipts and of the disbursements of all funds contain duplications and do not correspond with the cost of government to the state. Some auditors and treasurers keep accounts of most of these transfers in such a way that they can be eliminated from the totals, but in hardly any case are

all of the difficulties and dangers of misconstruction and misapprehension avoided.

Sometimes, too, appropriations are made in such a way that it is impossible for the auditor to keep a satisfactory set of accounts. For example, one state auditor writes: "We have what I consider to be a very poor system of appropriating money in this state; for instance, an appropriation is made by the legislature for a state institution or department, and then, in addition, the state institution or department is allowed to draw from the general fund the amount it may require for certain purposes and the result of this system is that it is almost impossible to tell the amount that may be drawn in many cases."

Another difficulty is that practically all the state accounts are of cash receipts and disbursements. The current costs of government for any particular year are not, strictly speaking, either the cash receipts or cash payments of that year; even still less accurately are they the tax levies of that year, or of the preceding year; rather they are more accurately the expenses accrued in that year. The total amount of cash received by the state treasurer from the first day until the last day of the fiscal year—and this is what his and the auditor's accounts show—may include large or small amounts that were due in the previous year and may fail to include equal or very unequal amounts that were due in this year but not received until later. If the lag were always exactly or even approximately the same, perhaps the figures for receipts would not be very misleading. But even then, receipts alone do not take account of balances on hand at the beginning and end of the year. If these are taken into account, we discard receipts as a measure of costs and go over to payments or disbursements.

Disbursements as a measure of current costs are perhaps the best practicable gauge that we have under existing systems of public accounting, but they, too, as an accurate measure, fall short in several respects. There is much the same difficulty about delinquent payments as about delinquent receipts. A second difficulty is that the state's fiscal year does not coincide with many of the natural fiscal years of certain activities. For example, the natural fiscal year for highway improvements may be the calendar year, so that a state's fiscal year ending June 30, or near that date, as is most common, shows parts of two years' expenditures, rather than one year's. It would seem that the natural fiscal year of universities and other state schools would correspond so well with the state's fiscal year that there would be no difficulty in these cases, at least; but owing to the lag, it is true in

practically every case that the state auditor's disbursements for these institutions contain parts of the expenditures of two different school years, rather than the complete disbursements for one year.

Another difficulty with payments or disbursements arises in connection with capital outlays and depreciation. It is obviously unsound to count as costs of government for one particular year the total disbursements that are made for permanent improvements or capital outlays such as those for lands and buildings. But it is not sound to leave out the entire expenditure for permanent improvements. "Permanent" is only a relative term; it may mean 100 years or 10 years or more or less. The average depreciation and obsolescence should be charged to each year, but no system of state accounts which we have examined attempts to take account of depreciation or makes yearly inventories of the state's assets. To do this accurately would be a rather difficult task and may or may not be justifiable on the basis of results, but there can be no accurate cost accounting in regard to public activities until it is done. No state, and few if any other divisions of government, have up-to-date accounting systems comparable to those of the better private corporations. The inertia inherent in governmental administration prevents modernization, and state accountants bemoan in vain the fact that they cannot extricate their accounts from the antiquated systems of the last century.

Though state auditors and treasurers do not carry depreciation accounts, there is a growing tendency to make a more or less rough separation or classification of payments for current purposes and for capital outlays. In many cases not even this is done, and when it is, there is little uniformity in the practice of the different states. In order to make the costs in the different states comparable, there should be uniformity in this as well as in other matters. In the present investigation this has meant much reclassification and has involved careful study of numerous state accounts, reports, and statutes, as well as consultations with, and explanatory letters from, the accounting officers of each state.

As mentioned above, not only differences in accounting, but differences in activities and functions also, give rise to much difficulty in comparing costs. For example, Wisconsin has no state auditor; most, though not all, of the usual functions of the auditor are performed by the secretary of state. The same state has a treasury agent who collects peddlers' licenses and turns them into the state treasury but who has no other connection with that office; no other

state has a corresponding state officer. Iowa alone of the six states compared has no tax commission. Some of the usual duties of this commission are performed by the auditor, the executive council, and an ex-officio board of equalization. The treasurer collects the inheritance tax in Iowa. The same is true in Wisconsin, though the tax commission performs some of the duties of assessment. In Minnesota this tax is collected by the attorney general and in Michigan by the auditor. The executive council in Iowa, which is a sort of cabinet or commission of state officers with expenses of its own not allotted to regular executive offices, has no counterpart in the other states compared. The state liquor licensing board and the board of public works in Ohio have no comparable counterparts in the other states. The boards of charities in different states have widely different powers and expenditures. The agricultural commission of Ohio has succeeded to the functions and powers formerly exercised by the state board of agriculture, the board of livestock commissioners, the board of control of the state agricultural experiment station, the dairy and food commission, the fish and game commission, the state board of veterinary examiners, and part of the former duties of the state board of pharmacy. In Indiana, there is no separate state banking, insurance or land department. The auditor looks after the usual activities of these departments, in so far as they are looked after. In Indiana and Michigan, each charitable and penal institution is under an independent board; in the other states of our group they are under central boards. In most states the state board of agriculture is a board which runs the state fair, but in Michigan it is a board of trustees or regents of the state agricultural college. A so-called state fair is held in Michigan, but the state government makes no appropriation and really has nothing to do with it. A county agent in most states means an agricultural supervisor; in Michigan it means a charitable officer. In some states, notably Iowa and Indiana, and Michigan in part, the auditors' reports take no account of earnings or fees of various institutions. In the other states most, though not quite all, of such receipts are covered into the state treasury and total disbursements as shown in the treasurer's and auditor's reports include both these earnings and ordinary appropriations from state funds. Ohio supports four state universities, Indiana two, each of the other states only one. In Michigan, Iowa, and Indiana, the state agricultural college is separate from the state university; in the other states, it is not, and its expenses cannot be satisfactorily separated from those of the uni-

versity. In most cases it is impossible to show separately the costs of the agricultural experiment stations.

The above list of differences is far from being exhaustive, but it illustrates the difficulties that must be met in making an accurate comparison of costs. Even if all of these difficulties were successfully overcome, not too much weight should be given to gross payments, or net payments, or even to per capita payments of state government as such; rather, they should be viewed in their relation to at least three other considerations: first, the burden of such payments in view of the wealth or income of the citizens of the respective states; second, the part of the total burden which payments of the state government as such entail in view of the fact that many functions performed in one state by the state government are left to the local divisions of government in other states, thereby lessening state taxes by increasing local taxes; and third, the extra services, if any, which the citizens of a state get because of the extra payments which they make. In other words, extra payments may or may not be more than justified by extra benefits which they make possible. Neither decreased nor increased cost payments are desirable or undesirable in themselves. The chief consideration is. Are the costs justified by the returns?

ROY G. BLAKEY.

REPORT OF THE INDIANA SPECIAL COMMISSION ON TAXATION. The last general revision of the Indiana tax laws was made in 1891. At that time, the legislature provided for the continuance of the general property tax, with certain minor changes from the plan previously obtaining, and created a State Board of Tax Commissioners to supervise the administration of the law. The state board was given power to assess such properties as railroads lying within the state, to reassess individuals and corporations upon appeal of the same from county boards of review, and to raise the assessments of the counties in whole or in part. The board, however, was not authorized to change local assessments upon its own initiative, nor was it given the power to appoint township or county assessors, nor to remove them in case of their inefficiency.

After about 1910, complaints against the operation of the general property tax system in Indiana became numerous and finally attracted state-wide attention. Accordingly, in 1915, the legislature authorized the appointment of a Special Commission on Taxation to study the problems of taxation as they had arisen in the experience of the state.

Subsequently five commissioners were appointed by the governor and the commission in turn secured the services of Professor Robert A. Campbell, of Cornell University, to act as its expert assistant. Under Professor Campbell's direction, a survey was made of representative counties to discover to what extent there was under-assessment of real estate. Figures were also collected relative to the assessment of personal property, both tangible and intangible. A number of hearings were held by the commission. As a result of these investigations, it was definitely established that most real estate was under-assessed, that there was wide variation in the assessment of all classes of property, and that but a fraction of intangibles was ever placed upon the tax duplicate.

In making its report (*Report of the Indiana Special Commission on Taxation*, Indianapolis, 1916) the commission failed to reach a unanimous decision. Three of its members—a real estate dealer, a farmer, and a former city official—declared that the general property tax was correct in theory, but that in Indiana it had broken down in practice merely because there had not been an efficient administration. These commissioners accordingly advocated increased powers for the State Board of Tax Commissioners—thereafter to be known as the Board of Tax Control—chief among which powers were to be the right to bring before itself for review any individual local assessment, and the right to bring proceedings in court for the removal of a local tax officer who should fail to perform his duty. The majority report also recommended the limitation of tax rates for the state, the counties, and the townships; such limitation to be preceded by a complete reassessment. It was not suggested, however, that the limitation of rates should be protected against legislative increases by an amendment to the constitution. The employment of "tax-ferrets," to search out intangible property, was also advised.

According to an opinion rendered by the attorney general of the state, the Indiana constitution excludes the employment of a classified property tax and also a progressive income tax. In view of this opinion, the majority report of the commission had little to say about an income tax; and it made practically no comment at all upon the merits of the classification plan. The latter fact is not surprising, however, when we consider the ardent defense made by the majority members in favor of a uniform general property tax.

Two minority reports were rendered: one by Professor William A. Rawles, of Indiana University, and the other by Fred A. Simms, a

former member of the State Board of Tax Commissioners. In contrast with the conservative and, in some ways, reactionary majority statement, the scholarly and scientific report of Professor Rawles stands out in pleasing relief. In this report, it was pointed out that the general property tax is incorrect in theory and that, even with a highly centralized administration, coupled with the employment of "tax-ferrets," the plan is impracticable. Limitation of tax rates as applied to special classes of property was granted approval provided such restriction was secured by the means of a constitutional amendment. Professor Rawles expressed the opinion that it would not be wise to go farther at the present time in the process of tax reform than to attempt a solution of the problem of the proper taxation of personal property. In this connection, he suggested the advisability of adopting either a classified property tax for intangibles or an income tax modeled after the Wisconsin plan; of the two plans, he favored the latter. Since the present constitution would forbid the inauguration of either of these schemes, a constitutional amendment was recommended which would afford the legislature complete freedom in putting them into operation.

The report of Mr. Simms took exception to the majority statement that the general property tax had failed in operation because of laxity in administration. It agreed with the recommendations in favor of limitations on the tax rate, provided these limitations applied to various classes of property. Mr. Simms was not prepared, however, to follow Professor Rawles in sweeping condemnation of the general property tax. To a considerable extent, the opinions in his report seem to be contradictory.

In conclusion, it is to be regretted that it proved impossible for the commission to agree upon a joint report in favor of the abolition of the general property tax and the creation of new means for raising the state's revenue. Such a result of the commission's deliberations would have great effect at the present time in promoting real tax reform in Indiana. It is a fact decidedly unfavorable to the Indiana commission that special investigations in other states of the Union have practically all condemned the general property tax and have especially disapproved of mediaeval inquisitorial methods for discovering sequestered property.

FRANK T. STOCKTON.

Indiana University.

The *Sixth Annual Report of the New Hampshire Tax Commission* (Concord, 1916, pp. 212) contains the papers read at the fifth annual

conference of the New Hampshire Association of Assessors, held in December, 1915. Among these are: "Municipal financing and accounting in New Hampshire," by Edward C. Mabie, assistant to the state tax commissioner (pp. 13-26); "Town and village accounts in New Hampshire," by Professor W. R. Gray, of Dartmouth College (pp. 27-42); "Taxation of intangibles," by J. H. Morris, of the board of assessors of Concord (pp. 80-86); and "Methods of valuing property for taxation," by Albert O. Brown (pp. 87-94).

The *Fifth Annual Report of the Board of Tax Commissioners of Rhode Island* (Providence, Jan. 15, 1917, pp. 49) has several pages devoted to description of the inheritance tax act of 1916.

In the *Report of the Tax Commissioner of Connecticut, 1915-1916* (Hartford, 1916, pp. 254), in addition to the statistical tables, there is extended comment on the taxation of inheritances (pp. 48-56), including a chart showing inheritance tax receipts since 1890. There are also charts of state receipts and expenditures for the year 1916. An account is given of the operation of the new tax laws of 1915. Extracts are reprinted from reports from tax commissions relating to topics immediately connected with tax problems in Connecticut and reprints of record cards and blanks used by tax officials (pp. 84-96). The brief submitted by the state to the supreme court on the taxation of water, gas, and electric companies according to gross earnings is also inserted, and there is a reprint of the addresses delivered at the Annual Conference of the State Tax Officials' Association held in Hartford in 1915 and 1916.

The *Proceedings of the Conference Held in Baltimore, Thursday, July 6, 1916, under the Auspices of the State Tax Commission of Maryland* (pp. 60) contains addresses on "Valuation," by A. C. Girdwood, secretary; "The needs of a general assessment in Maryland," by A. P. Gorman, chairman; "Plan for general reassessment of real estate," by L. W. Wickes, of the tax commission; "Administrative problems," by Oscar Leser, also a member of the commission; and "Methods of assessment in Baltimore City," by T. J. Lindsay, special assessor in Baltimore.

In connection with the proposed legislation for changing the tax system in Kentucky, the Louisville Real Estate Board submitted a brief on *Taxation of Mortgages in Kentucky* (pp. 67), prepared by E. L. McDonald. This advocates a mortgage recording tax.

The *Second Annual Report of the South Carolina Tax Association* (Columbia, 1917, pp. 133) is largely devoted to statistical tables.

The *Second Biennial Report of the Tax Commission of South Dakota* for 1915-1916 (Pierre, 1916, pp. 233) again returns to the advisability of placing local assessment under the supervision of county assessors as a substitute for local town assessors. There is a summary of laws of other states relating to abatements, rebates, and refunds. A map on page 57 shows the average assessed value of farm land per acre.

The Tax Commissioner of Massachusetts has published *Instructions to Assessors* (Boston, 1917, pp. 45) in accordance with a law passed in 1916. The purpose of this is to secure uniform assessment of real estate and tangible personal property.

The New York State Tax Department has prepared a *Review of Local Assessments, 1916* (Albany, vol. 1, no. 5, Nov., 1916, pp. 66). It deals largely with equalization.

The State Tax Board of Virginia has published two bulletins: *The Effect of Segregation in Virginia* (Richmond, Sept. 14, 1916, pp. 8); and *The Taxation of Intangibles in Virginia* (Nov. 11, 1916, pp. 13). These are issued in the form of instructions to local officials.

The Tax Commissioner of Massachusetts in Bulletin No. 1 summarizes the *Requirements of the Massachusetts Tax Law* (Boston, 1916, pp. 39), giving detailed explanations in regard to the provisions of the new income tax law.

Various banks have recently published pamphlets dealing with the new tax laws, among which may be noted: by the Bankers Trust Company, *The Federal Income Tax Law*; (pp. 46) and by the Guaranty Trust Company of New York, *The Federal Estate Tax Law and Regulations (Inheritance Tax)* (pp. 35); *The Transfer Tax Law of the State of New York as Amended in 1916* (pp. 47); and *The Secured Debts Tax Law and Mortgage Tax Law of the State of New York* (pp. 56).

Students of municipal finances are advised to note the reports of the Comptroller of the City of New York in the series known as *Financial Summary* appearing monthly and quarterly. The tables in these reports "follow the plan of progressing from generalities to particulars; from a comprehensive view of the total amount and general scope and purpose of the City's receipts and payments to a significant classification of each prime element." This series dates from the beginning of 1913.

Insurance and Pensions

A new annual edition has been published by the Insurance Department of the State of New York of *Fees and Taxes Charged New York*

Insurance Companies by the Insurance Departments of Other States for 1917 (Albany, 1916, pp. 52).

The Industrial Commission of Wisconsin has prepared a bulletin on *Workmen's Compensation Insurance* (Madison, August, 1916, pp. 33). This contains a discussion of compensation cost, management expenses, insurance rates, and losses, with statistical tables.

The Board of Compensation Commissioners of Connecticut has issued a volume entitled *Compendium of Awards of the Compensation Commissioners for the years 1914 and 1915 and for the Months of January to May Inclusive of 1916* with the decisions of the Connecticut courts of appeal (pp. 732).

The *Fifth Annual Report of the Industrial Insurance Department of Washington* deals with the workmen's compensation act (Olympia, 1916, pp. 175). A full discussion is given of the operation of the system since its establishment in 1911.

The address by Walter G. Cowles, vice president of the Travelers Insurance Company, delivered before the Insurance Society of New York, October 17, 1916, on *The New York Standard Compensation Policy Forms* has been reprinted by the Travelers Insurance Company of Hartford (pp. 21).

A committee of investigation of the Province of British Columbia has published a report on *Workmen's Compensation Laws* (Victoria, Mar. 1, 1916, pp. 21). This committee visited the states of Washington, Oregon, California, Wisconsin, Ohio, New York, and Massachusetts, and the provinces of Ontario and Nova Scotia. Hearings were held in fourteen cities. Its recommendations are presented in concise and clear form. The evidence is also published in four volumes.

The Bureau of Statistics of Massachusetts has made a *Report of a Special Inquiry Relative to Aged and Dependent Persons in Massachusetts, 1915* (Boston, Dec. 15, 1916, pp. 107). This study may serve as a statistical basis for any proposed legislation for old age insurance. It is noted that this is the third inquiry on old age pensions which has been made in Massachusetts since 1907. The report was prepared under the immediate supervision of Mr. Roswell F. Phelps, of the Bureau. Appendix C contains a bibliography on old-age pensions, 1912-1916; and another appendix gives a description of systems in foreign countries.

The following pamphlets deal with health insurance: *The Need for Health Insurance*, by Irving Fisher (reprinted from the *American Labor Legislation Review*, vol. VII, no. 1, 1917, pp. 16); *Health In-*

Insurance Standards and Tentative Draft of an Act Submitted by the Committee on Social Insurance of the American Association for Labor Legislation (third edition, May, 1916, pp. 32); *Dangerous Tendencies in the American Social Insurance Movement*, by P. T. Sherman, an address delivered before the Insurance Society of New York, November 21, 1916 (pp. 14). Of allied interest are *Health of Garment Workers; the Relation of Economic Status of Health*, by B. S. Warren and Edgar Sydenstricker, published by the United States Public Health Service (Washington, Reprint No. 341, 1916, pp. 10); *A Sickness Survey of North Carolina*, by L. K. Frankel and L. I. Dublin (Washington, United States Public Health Service, Reprint No. 367, 1916, pp. 27); *A Sickness Survey of Boston, Massachusetts*, by L. K. Frankel and L. I. Dublin (New York Metropolitan Life Insurance Company, 1916, pp. 23).

Demography

The Bureau of the Census has made *Estimates of the Population of the United States* as of July 1, 1915, January 1, 1916, July 1, 1916, and January 1, 1917.

The paper by Lee K. Frankel, of the Metropolitan Life Insurance Company, entitled *A Study of Mortality Statistics of Southern Communities*, read before the Southern Sociological Congress of New Orleans, April 12, 1916, has been reprinted as a pamphlet (pp. 15). This is a useful summary of the surveys which have been made during the past few years of the health conditions in the southern cities. Based upon such surveys, the author presents data to indicate the effects which health campaigns have had upon mortality in that section of the United States. Tables are prepared derived from the reports of the Bureau of the Census and also the experience of the Metropolitan Life Insurance Company, with comparisons for the white and colored population.

The federal Bureau of the Census has issued the following reports: *Cotton Production and Distribution, 1915-1916* (Bull. 134, 1916, pp. 99); *Rice Cleaning and Polishing. Census of Manufacturers: 1914* (1916, pp. 9); *Financial Statistics of States, 1915* (1916, pp. 125); *Mortality Statistics, 1914* (1916, pp. 714).

Federal Public Documents

FEDERAL DOCUMENTS AND THE REVISION OF THE PRINTING LAWS. The economists of this country probably make more use of the publications of the federal government than any other single group of

readers. They will, therefore, have a special interest in the proposal now before Congress to revise and codify the printing laws, embodied in the printing bills (Senate bill 1107 and House bill 8664).¹ These two bills are practically identical and closely follow the provisions of the printing bills introduced in the preceding Congress. The particular interest of each economist in these bills relates to the provisions they make for placing copies of official publications where he may consult them. This need is, of course, best met by a system of prompt distribution of a complete file of the important documents to the libraries of the institution with which he is connected or in some library available to the public generally. Up to the present time this has been attempted by making one library in each congressional district a "depository" library—that is, a library in which public documents are regularly deposited free of charge on condition that the public is allowed free reference use of the volumes. There are now about 500 of these depositories. They include the libraries of most of the larger colleges and universities, and usually it is to these libraries that the economist must refer in order to consult this material.

When the plan of depository libraries was adopted, it was apparently the intention of Congress that each should keep on its shelves a complete file of federal publications; and at first practically everything printed for the government was sent to each depository in the form of a "collected set" of documents. This file usually contained not only the documents printed for the special use of Congress but also those printed by the executive departments for the information of Congress. From the Fifteenth Congress, this "collected" or "congressional" set of documents has consisted of four series: Senate reports, House reports, Senate documents, House documents. At the time the system of depository libraries was inaugurated, the publications of the federal government consisted of about one hundred items annually; and apparently it was assumed that there would be no difficulty in having the depositories keep for their readers complete files of these records of the operations of the national government. In recent years interest in these publications has increased and some complaints have arisen because the work of arranging and binding the documents in sets, with document numbers, volume, and serial numbers affixed, delayed the dis-

¹ In the hope of effecting some of the economies of these bills, the Printing Committee of the Senate introduced, on January 10, a brief bill (Senate bill 7795) containing some of the more important provisions of the larger bills. This bill has been passed by the Senate, but it is doubtful if there will be time to pass it in the House during the present session.

tribution of the sets to libraries until some months after the close of each session of Congress. To make the information available as soon as possible, the plan was adopted of a preliminary distribution; that is, upon the publication of an annual report, such as that of the Secretary of the Treasury, unbound copies without document numbers—the so-called plain-title or departmental edition—were immediately sent to the depositories. Later on, the same volume would be given its House document number and made part of the collected set. There would thus be two editions of the same publication sent to the libraries. In some cases the same publication would appear in more than two editions. This duplication of editions of course has caused the libraries considerable labor and some confusion in the listing, cataloguing, and indexing of the documents.

At the present time the number of congressional documents and reports amount to about 2,000 annually. In the two years of the Sixty-third Congress (April 7, 1913-March 3, 1915) this number was 5,309, and the "collected" or "congressional" set was bound up into 352 volumes. In addition to these 352 volumes, there were a large number of departmental publications not included in the set. The present situation is, therefore, that libraries and institutions receiving federal publications must expect to handle this large volume of printed matter, part of which is in the form of the collected set (with volume and document numbers attached) and part of which is in the departmental or plain-title editions.

To simplify this situation, the representatives of the libraries and others have recommended the plan of publishing one edition only of each document and by preference publishing only the edition without any document number. In response to these appeals, Congress, in 1907, directed that all annual and serial publications originating in the executive departments should not be included in the numbered document series of Congress, even though the publication were one specifically ordered to be printed by either house. The plan was in operation for less than one year, and proved to be unsatisfactory to those connected with the work of Congress. In January, 1908, Congress directed that the document numbers should be replaced on the annual and serial publications which are required by law to be submitted to Congress but provided that the depository libraries should receive these publications only in the plain-title editions, without document number. Thus the congressional set for the first session of the Sixty-fourth Congress (December 6, 1915-September 8, 1916)

consists of 3 volumes of Senate reports, all distributed to the depositories; 4 volumes of House reports, all distributed; 44 volumes of Senate documents, all except volume 2 distributed; 149 volumes of House documents, only the following being distributed to the depositories: volumes 3-4, 17, 21-26, 29, 39-40, 85-87, 122, 126, 137-149. The numbers omitted had been distributed in the plain-title or departmental editions, so that only 30 out of the 149 volumes of uniformly bound House documents have been sent to the libraries; if a library desires to make up a complete set to continue its former files, the departmental editions must be inserted in the missing spaces.

Obviously the arrangement is an unsatisfactory compromise. Expressed in its simplest terms the problem amounts to this: The congressional set is a convenient form of preserving the reports and documents needed by a legislative body—in fact practically all the important countries of the world have adopted a form similar to this for the use of their parliamentary bodies. The difficulty arises when this piece of legislative apparatus is presented to libraries whose needs call for an entirely different arrangement of this material.

In the work of a large legislative body, such as the Congress, it is of considerable importance to have an identifying mark on each publication in addition to the title of the document. Many of the titles closely resemble each other—in some cases recent documents have had the exact title of earlier documents; many of the titles are misleading and apparently have no connection with the subject-matter of the report; the names of the authors (*i.e.*, bureaus or departments) change frequently; several departments have had bureaus with identical names (such as the old bureaus of statistics in at least three departments); sometimes two or more departments will issue reports on the same subject. In the next place, it is important to Congress to have all the reports, submitted to it at each session, published in one document set; these reports from the executive departments are prepared for the use of Congress, which has by law required their presentation; and at the present time they number between 400 and 500 annually. In the hurry of a legislative session, with over 500 members of the two houses to be supplied with this material, these points probably have much greater weight to the officials of Congress than they have outside of the city of Washington. On the other hand, the need of those engaged in research work is for a file of documents arranged by subject; and in order to enable the libraries to do their work efficiently in meeting this need, the publications should, as far as possible, be printed in

a form which will enable the libraries to arrange the volumes in this manner. It is also a help to the libraries to have but one edition of each publication.

The printing bills now before Congress provide that when a document is once printed it shall always retain that form, and even if ordered reprinted by either house the original titles must be kept. It specifies, however, that reports required to be made to Congress by law shall be issued as numbered documents, and the reprints of these must retain the document number. This will eliminate from the congressional set such publications as the Geological Survey bulletins, monographs, Ethnology bulletins, Pan-American Union bulletins, and the like, which of course are not usually required by Congress in the enactment of legislation.

This solution of the problem will not be satisfactory to those who have urged the abolition of the congressional set as the only logical way to settle the problem. The bill provides, however, that the Joint Committee on Printing of the two houses shall have charge of the binding of documents for the depository libraries. As this committee and its officials have always taken a sympathetic attitude towards the wishes of the libraries, their needs will undoubtedly be given careful consideration in making up the sets for libraries. In particular, the recommendation of the Superintendent of Documents that the volume numbers be omitted from the sets, and that the actual title of the volume be made the principle title with the document number as a secondary title, will undoubtedly be taken up soon after the bill is enacted.

One feature of the bill which will be of assistance to economists is the so-called valuation plan of distribution of documents to members of Congress. The existing printing laws provide that each member shall receive a small number of every document published, with the result that the member from a city district is given the same number of agricultural publications, which he cannot use, as the member from a farming district, while the latter is given a number of publications which he does not need, but which would be of use to the city member. The proposed valuation plan provides each member of the House with a book credit of \$1,800 and each Senator with a similar credit of \$2,200 annually. On demand, the Superintendent of Documents must supply each member with available publications up to the values just named. This will make it possible for a library, or for any one interested, to apply to a member of Congress for copies of publications; and, instead of being limited to one or two copies of important documents as at present, the member will be in a position to furnish a number of copies

of important items from his account. The plan will also enable a library to secure additional copies of documents for seminar or other reference collections, while the instructor will find it more easy to obtain copies for personal use.

In order to show clearly the present status of the congressional set of public documents, a list is appended which indicates the form in which the documents of the first session of the Sixty-fourth Congress will be distributed.

HENRY J. HARRIS.

Library of Congress, Washington, D. C.

SENATE REPORTS

Serial Number

Vols. 1-3—Nos. 1-871 (with exceptions): Miscellaneous 6897-6899

Vols. A-C—Nos. 8-869 (with exceptions): Reports on private bills, etc. 6900-6902

HOUSE REPORTS

Vols. 1-3—Nos. 4-1201 (with exceptions): Miscellaneous 6903-6905

Vol. 4—No. 284, 2 pts.: Revision of laws, common carriers and antitrust, report and proposed bill. 6906

Vols. A-D—Nos. 1-1194 (with exceptions): Reports on private bills, etc. 6907-6910

The lettered volumes contain only the reports on private bills and joint resolutions and on simple resolutions. Under the provision of the act of January 20, 1905, the "usual number" of such reports could not be printed. These private reports are bound in volumes lettered A to C for Senate reports and A to D for House reports. These cannot be furnished to depository libraries, but copies will be kept in the Senate and House libraries, the Library of Congress, and the library of the Office of the Superintendent of Documents. Volumes 1-3 of the Senate and volumes 1-4 of the House, which will be furnished as usual, contain all the reports on public bills and joint resolutions ordered printed during the session.

SENATE DOCUMENTS¹

Vol. 1—No. 1: Report of secretary of Senate, July 1, 1914-June 30, 1915 6911

Vol. 2—No. 2: Report of Government Printing Office, 1915 6912

Vol. 3—No. 3: Navy yearbook, 1883-1916. 6913

Vol. 4—No. 21: Laws of 3d Philippine legislature, 3d session, with certain laws enacted by Phillippine Commission 6914

Vols. 5-6—No. 247: Fiscal relations between United States and District of Columbia, report of Joint Select Committee, with hearings 6915-6916

¹ Volume 2 is omitted from the sets supplied to libraries.

Vol. 7—No. 268: Aeronautics, 1st annual report of National Advisory Committee for Aeronautics, Mar. 3-June 30, 1915	6917
Vols. 8-10—No. 316: Electric power development in United States, pts. 1-3	6918-6920
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PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Theory

(Abstracts by W. M. Adriance and A. N. Young)

DEL VECCHIO, G. *Questioni di economia teorica relative alle guerra.* Giorn. d. Econ., Aug., 1916 (supplement). Pp. 40.

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FETTER, F. A. *An appeal to "the sober reader."* Journ. Pol. Econ., June, 1916. Pp. 10.

A reply to Professor Davenport's review of Fetter's *Economic Principles*. It is urged that the reviewer has been unfair in various ways, particularly in imputing to Professor Fetter views which he does not hold.

FREY, J. P. *Robert F. Hoxie: investigator and interpreter.* Journ. Pol. Econ., Nov., 1916. Pp. 10.

An account of Hoxie's methods in the teaching and study of labor problems.

HAMILTON, W. H. *The development of Hoxie's economics.* Journ. Pol. Econ., Nov., 1916. Pp. 29.

An able study of Hoxie's mental development and varied interests by a writer to whom Hoxie, the man, had plainly made strong appeal.

PERSONS, C. E. *Teaching the introductory course in economics.* Quart. Journ. Econ., Nov., 1916. Pp. 22.

College teaching should be training for citizenship. More emphasis should be put upon teaching ability differentiating between the teacher and the research professor. Teaching should consist of training the student to think. The lecture method should be abandoned, and greater reliance be put upon the closer contact of teacher with student.

THORNBERG, E. H. *Produktion och förvärf.* Ek. Tids., No. 5, 1916. Pp. 11.

A theoretical discussion of production and consumption. The author is not content with a mere equalization of production and consumption, but desires social income stream that satisfies human wants and increases productive power.

WHITAKER, A. C. *Fetter's principles of economics.* Pol. Sci. Quart., Sept., 1916. Pp. 15.

A review of Prof. Fetter's recent text. In the main sympathetic and commendatory. The writer feels that Fetter has put himself to unnecessary trouble in squaring his terminology with the conclusions of modern psychology.

ZEUTHEN, F. *En moderne liberalist*. Nat. ök. Tids., July-Oct., 1916. Pp. 21.

An appreciative presentation of Carver's theory of distribution, contrasting it with the socialistic.

A tentative bibliography of Robert F. Hoxie's published works. Journ. Pol. Econ., Nov., 1916. Pp. 3.

Economic History, United States

(Abstracts by E. L. Bogart)

ABEL, A. H. *The journal of John Greiner*. Old Santa Fé, July, 1916. Pp. 50.
Greiner was an Indian agent in New Mexico in 1852.

ANDREWS, C. L. *Alaska under the Russians: industry, trade, and social life*. Wash. Hist. Quart., Oct., 1916. Pp. 18.
Covers the period 1817-1867.

ATKINSON, B. A. *Reminiscences of the old stage line*. Overland, June, 1916.

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A review of Dr. Clark's book emphasizing those parts which lend support to the doctrine of high protection.

CLEVELAND, F. A. *An analysis of the Indian Bureau*. Am. Indian Mag., Apr.-June, 1916.

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A trail followed by free state immigrants through Iowa to Kansas.

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The confederacy endeavored to secure the allegiance of the northern states by making the trade free, and the federal government was inactive in prohibiting it for fear of alienating them.

COX, I. J. *The new invasion of the Goths and Vandals*. Pro. Miss. Valley Hist. Assoc., vol. VIII, 1915. Pp. 25.

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DALE, H. C. *The organization of the Oregon emigrating companies*. Quart. of Oregon Hist. Soc., July, 1916.

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An account of the agricultural exhibits of Minnesota, which started a stream of emigration to that state.

LEE, J. *Journey from Liberty, Missouri, to the Oregon country in 1834*. Quart. Ore. Hist. Soc., June, 1916.

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SEARS, D. *David B. Sears, pioneer in the development of the water power of the Mississippi River.* Journ. Ill. State Hist. Soc., July, 1915.

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Describes the building of a road between Forts Walla Walla and Benton in 1859, by the federal government under the direction of Lieutenant Mullan.

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Method of estimating volume of domestic trade.

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Advocates strict governmental control of food distribution and equitable income and inheritance taxes instead of embargo.

LEWIS, H. T. *The elevator movement in the Pacific Northwest*. Journ. Pol. Econ., Oct., 1916. Pp. 11.

Comparative advantages and costs of handling wheat in sacks and in bulk.

PAYEN, E. *Le caoutchouc: sa consommation et ses prix*. L'Econ. Franç., Oct. 14, 1916. Pp. 2.

Influences affecting prices.

PAYEN, E. *Le coton dans les colonies françaises*. L'Econ. Franç., Dec. 9, 1916.

Results of efforts to increase production.

PAYEN, E. *Le coton: sa production et ses prix*. L'Econ. Franç., Nov. 4, 1916.

Annual review.

PAWLOWSKI, A. *Les Ports français pendant la guerre (1914-1915)*. Journ. des Econ., Sept., 1916. Pp. 13.

Statistics for increase in traffic.

RAFFALOVICH, A. *L'Allemagne et la commerce international des métaux*. Journ. des Econ., Sept., 1916. Pp. 3.

Ramifications of German metal "trust."

RAFFALOVICH, A. *L'industrie des machines en Russie*. L'Econ. Franç., Oct. 14, 1916. Pp. 2.

Slow increase in domestic production despite protective tariff.

RAFFALOVICH, A. *Observations on the foreign trade of Russia during and after the war*. Econ. Wld., Nov. 18, 1916. Pp. 3.

Translation of article in *L'Economiste Française*.

ROBERTS, G. E. *Broadening the average of American business through the development of foreign fields*. Econ. Wld., Oct. 7, 1916. Pp. 5.

Means of expanding our future trade.

SCHMIDT, L. W. *Monthly analysis of the industrial markets*. Moody's Mag., Dec., 1916. Pp. 6.

No cause for alarm regarding business outlook, but caution necessary.

TOWER, W. S. *Buying South American goods as a factor in selling to South America*. Journ. Pol. Econ., Nov., 1916. Pp. 6.

No direct relation between purchases and sales in trade with any South American country.

Brazil. South Am., Dec., 1916.

Series of articles on resources and trade possibilities of Brazil.

How strong governments back foreign enterprises. Americas, Nov., 1916. Pp. 5.

Methods of trade control and promotion.

Latin American foreign trade in 1915—general survey. Bull. Pan. Am. Union, Nov., 1916. Pp. 10.

Decrease in imports; increase in exports; statistics by countries.

List of references on the trade of the United States as affected by the war. Special Libraries, Sept., 1916. Pp. 5.

Books and periodicals.

To protect the commerce of the city of New York. Greater N. Y., Nov. 6, 1916.

Objections to readjustment of through freight rates requested by New Jersey cities.

Vast possibilities seen in foreign trade outlook. Greater N. Y., Oct. 23, 1916.

Balance of trade; repurchase of securities; foreign loans; financial problems.

Public Utilities

(Abstracts by Ralph E. Heilman)

CLARK, E. *Municipal ownership in the United States.* Intercollegiate Socialist, Oct.-Nov., 1916.

A compilation of recent statistics regarding the extent, distribution, and growth of the municipal ownership movement in the United States.

COOKE, M. L. *The thermal test and the gas situation.* Utilities Mag., Nov., 1916.

The nation-wide effort of gas companies to secure a reduction in the candle power requirement for gas, with particular reference to the proposed change in Chicago.

COOKE, M. L. *The nationalization of the private utility interests.* Utilities Mag., Nov., 1916.

New problems and dangers arising, because of the nationalization of the control of local utility properties.

DREYFUS, E. D. *Reckoning with costs of superseded equipment.* Elec. Wld., Aug. 5, 1916.

Reasons why expenditures should be permitted to remain in the capitalization.

ERICKSON, H. *Problems in rate regulation accentuated by higher operating costs.* Elec. Wld., Jan. 6, 1917.

Rates cannot be safely based upon past costs, in view of the rising prices of labor, capital, and materials.

FLEMING, S. W., JR. *Rewarding ably-managed public utilities.* Elec. Wld., Nov. 4, 1916.

Considers the problem of inducing and rewarding economy and efficiency in management of properties of whose rates are subject to regulation by commission.

KEALY, P. J. *Overhead charges in valuation.* Aera, Oct., 1916.

Points to the wide divergence in existing methods of handling overhead, defines terms, and gives examples of percentages allowed in various well-known appraisals.

KING, C. L. *National issues in local franchises.* Elec. Ry. Journ., Oct., 14, 1916.

Franchise privileges should be so drawn as to safeguard actual money investment, with a sufficient rate of return to keep and attract capital.

KING, C. L. *Rules regulating water service adopted by state public service commissions.* Utilities Mag., Nov., 1916.

A summary of the rules adopted by the various commissions, regulating water service standards.

LEAVITT, B. *How commission regulation is working out for the consumer and the utility.* The Bulletin (United Gas & Elec. Eng. Corp.), Dec., 1916.

Results achieved, both for the public and the utility companies, through commission control.

LINCOLN, E. E. *Control of return on public utility investments.* Am. Econ. Rev., Dec., 1916.

Failure to allow a premium for efficiency in rate regulation will prove disastrous.

MELLING, H. T. *Operating costs for municipal gas engine plant.* Power, July 4, 1916.

OLDHAM, J. E. *Report of public service corporation committee.* I. B. A. of A. Bull., Oct. 18, 1916.

Report of the public service corporation committee of the Investment Bankers Association of America. Deals chiefly with provisions for a proposed savings bank law for investment in public utility bonds.

PIKE, C. W. *Service standard for electric light and power companies as prescribed by public service commissions.* Utilities Mag., Sept., 1916.

Comparison of service standards for electric light and power, as established by the various state commissions.

RICHBERG, D. R. *The Chicago gas case.* Utilities Mag., Nov., 1916.

Summary of the steps and development leading up to the present situation.

SHONTS, T. F. *The public service corporation and the working man.* Elec. Ry. Journ., Dec. 16, 1916.

Abstract of an address delivered before the Illinois Manufacturers Association. Emphasizes necessity of continuity of service, and the joint responsibility of labor and capital to maintain the same.

VALENTINE, A. L. *Prospects poor for Seattle municipal lives.* Elec. Ry. Journ., June 24, 1916.

A synopsis of the report of the superintendent of public utilities to the city council of Seattle.

WILSON, C. P. *Financing utilities operating under state control.* Gas Age, July 15, 1916.

Commissions should protect the rate of returns to stockholders as well as to bondholders. Rate of return for gas utilities should be from 8 to 10 per cent upon the valuation, varying inversely with the size of the property.

WOON, A. E. *The labor problem of municipal utilities.* Utilities Mag., Sept., 1916.

Labor problems and conditions upon street railways, and the relation of public service commissions thereto.

Boston Elevated seeks financial relief from commission. Elec. Ry. Journ., Sept. 30, 1916.

Special committee appointed to consider the Boston Elevated Railway Company claims as to the need for additional revenue. The company's proposals look toward assurance of 6 per cent dividends on stock.

Brooklyn rate order not accepted. Elec. Wld., Dec. 2, 1916.

Edison Electric Illuminating Company of Brooklyn requests a rehearing upon the recent rate decision of the New York First District Commission. Allowances made for depreciation constitute the center of the chief controversy.

The individual service contract in Indianapolis. Elec. Ry. Journ., Sept. 30, 1916.

Description of the individual contracts in use between electric railway employees in and around Indianapolis, and their companies. So far as known, these together with the New York contracts are the only individual working agreements in the electric railway field.

Kansas City railway gains public favor. Elec. Ry. Journ., Sept. 30, 1916.

Description of the methods employed by the Kansas City street railway to change adverse public sentiment and win public favor.

Regulating \$5,313,000,000 of utilities. Elec. Ry. Journ., Dec. 30, 1916.

A description of the administrative and departmental organization of the New York Second District Commission.

Railways and Transportation

(Abstracts by Julius H. Parmelee)

ADAMSON, W. C. (See entry under THOM, A. P.)

ALLIX, G. *La grève des agents des chemins de fer du Nord de l'Espagne.* Journ. des Trans., Oct. 7, 1916. Pp. 4.

ALLIX, G. *Salaires et tarifs.* Journ. des Trans., Dec. 16, 1916. Pp. 2.

BALCH, C. F. *Analyzing a typical freight car journey.* Ry. Age Gaz., Dec. 22, 1916. Pp. 3.

BALL, W. H. *The company's pension plan.* B. & O. Employe's Mag., Nov., 1916. Pp. 8.

Description of the Baltimore & Ohio Railroad's pension plan.

BARTHOLOMEW, W. S. *Mechanical firing of locomotives.* Pro. St. Louis Ry. Club, Nov. 10, 1916. Pp. 44, illus.

BELLET, D. *Les chemins de fer et la guerre.* Journ. des Econ., Sept., Oct., 1916. Pp. 14, 22.

BELNAP, H. W. *Car inspection a vital factor in operation.* Ry. Age Gaz., Jan. 19, 1917. Pp. 6.

BONNER, F. A. *Is Intercolonial's failure due to low rates?* Ry. Age Gaz., Dec. 15, 1916. Pp. 4.

Holds that the losses of the Intercolonial Railway (Canada) have been due rather to government management.

BOWEN, S. W. *A municipal river terminal system for St. Louis.* Journ. Engg. Club of St. Louis, Nov.-Dec., 1916. Pp. 86.

With diagrams, profiles, statistical tables, and appendixes.

BROWN, F. *Demurrage.* Stone & Webster Journ., Jan., 1917. Pp. 4.

BUCK, A. M. *Some graphical solutions of electric railway problems.* Univ. Ill. Bull., July 24, 1916. Pp. 36.

CARTER, W. S. *The Adamson law: the employees' viewpoint.* Pro. Acad. Pol. Sci., Jan., 1917. Pp. 9.

CARTER, W. S. *What the railroad employees are fighting for.* N. Y. Times Mag., Dec. 10, 1916. Pp. 2.

Railway trainmen's point of view in the eight-hour controversy, stated by one of their leaders.

CLAPP, E. J. *The Adamson law.* Yale Rev., Jan., 1917. Pp. 19.

COLBY, B. *The Adamson law: the public viewpoint.* Pro. Acad. Pol. Sci., Jan., 1917. Pp. 4.

COOK, W. W. *Legal possibilities of federal railroad incorporation.* Yale Law Journ., Jan., 1917. Pp. 17.

COUNTY, A. J. *Railroad credit and the success of regulation.* Ry. Age Gaz., Nov. 3, 1916. Pp. 3.

CUNNINGHAM, W. J. *What shall we do with our railroads?* Stone & Webster Journ., Jan., 1917. Pp. 14.

DANIELS, W. M. *Some of the very pressing transportation problems.* Ry. Age Gaz., Jan. 5, 1917. Pp. 3.

Freight congestion, car shortage, rate levels, labor difficulties, etc.

DELANO, F. A. *The railway problem.* Ry. Rev., Jan. 20, 1917. Pp. 5.

Unsatisfactory railway situation due to general misapprehension of various aspects of the problem.

ERICKSON, H. *Problems in rate regulation accentuated by higher operating costs.* Elec. Wld., Jan. 6, 1917. Pp. 5.

FAGAN, J. O. *The railroads and the people.* Yale Rev., Jan., 1917. Pp. 14.

Pleads for better understanding of railway problems, and coöperation and arbitration in labor disputes.

FAHY, W. J. *The problem of government ownership.* Nat. Mag., Aug., 1916.

FELTON, S. M. *New influences affecting passenger traffic.* Ry. Age Gaz., Dec. 1, 1916. Pp. 2.

Especially automobile competition.

GARRETSON, A. B. *The attitude of the railroad brotherhoods toward hours and wages.* Ann. Am. Acad., Jan., 1917. Pp. 3.

GARRETSON, A. B. and LEE, E. *Both sides of the railroad problem.* Independent, Jan. 22, 1917. Pp. 3.

HILL, A. R. *How railroads' dividends may be increased.* Pro. St. Louis Ry. Club, Dec. 8, 1916. Pp. 10.

By developing freight transportation, especially in agricultural products.

HOFFMAN, L. E. *Federal arbitration legislation.* Ann. Am. Acad., Jan., 1917. Pp. 6.

Historical discussion.

HOPKINS, J. H. *A monthly analysis of operating expenses.* Ry. Age Gaz., Jan. 5, 1917. Pp. 3.

With suggested schedule to show monthly unit costs of operation.

IRETON, R. E. *Regulating railroads through federal incorporation.* Case & Comment, Oct., 1916. Pp. 5.

JOHNSON, E. R. *Legislation concerning the railroad service.* Ann. Am. Acad., Jan., 1917. Pp. 9.

KEILPFLUG, E. *Der Ausgleichsfonds der preussischen Staatsbahnen.* Archiv f. Eisenbahnw., Nov.-Dec., 1916. Pp. 36.

The Prussian state railway sinking fund; the law of 1903 creating it, with a discussion of its operation and development. Last article in a series; the first article has not been received.

KELLEY, J. *Long trains and long hours.* Locomotive Engrs. Journ., Dec., 1916. Pp. 4.

KERR, K. C. *American history as told in transportation literature.* VII. *Building the first transcontinental line.* Ry. & Marine News, Nov., 1916. Pp. 6.

LAFFEY, M. C. *The Denver & Rio Grande.* Moody's Mag., Nov., 1916. Pp. 4. Statistical and financial analysis.

LA ROE, W., JR. *The function of an examiner.* Traffic Wld., Dec. 30, 1916. Describes the work of an Interstate Commerce Commission examiner.

LAUCHHEIMER, M. H. *The constitutionality of the eight-hour railroad law.* Columbia Law Rev., Nov., 1916. Pp. 11.

LAUCK, W. J. *The case of railroad employees for an eight-hour day.* Ann. Am. Acad., Jan., 1917. Pp. 10.

LEE, B. *Commission government.* I. *The next thing in railway regulation.* Outlook, Aug. 30, 1916. Pp. 4.

LEE, E. (See entry under Garretson, A. B.)

LEE, I. L. *The technique of publicity.* Elec. Ry. Journ., Jan. 6, 1917. Pp. 3.

LEIGH, E. B. *The true relation of shippers to the transportation problem.* Ry. Rev., Dec. 30, 1916. Pp. 3.

Plea for equity and fair dealing for the railways.

LINCOLN, E. E. *The control of return on public utility investments.* Am. Econ. Rev., Dec., 1916. Pp. 5.

Reply to J. Bauer in September, 1916, number of the REVIEW.

McCABE, D. A. *Federal intervention in labor disputes under the Erdman, Newlands, and Adamson acts.* Pro. Acad. Pol. Sci., Jan., 1917. Pp. 14.

MARSH, A. R. *American railroads and their prosperity in 1916.* Econ. Wld., Dec., 1916. Pp. 2.

MONKSWELL, R. A. H. C. *German railways: early days and development.* Ry. News, Nov. 1, 1916. Pp. 2.

NAGEL, C. *The railway wage law.* Journ. Engrs. Club St. Louis, Sept.-Oct., 1916. Pp. 16.

NEWLANDS, F. G. *The forthcoming railway inquiry.* Ry. Rev., Nov. 11, 1916.

By the chairman of the joint congressional committee in charge of the inquiry.

NOXON, F. W. *The enfant terrible of the railroads.* Nation's Business, Jan., 1917. Pp. 3.

Historical discussion of the principle of state rights and state control over railways.

PARK, W. L. *Railways as a part of a system of national defense.* Pro. Western Ry. Club, Sept. 18, 1916. Pp. 12.

PARMELEE, J. H. *The problem of railway trainmen's wages.* Ann. Am. Acad., Jan., 1917. Pp. 12.

History and analysis of conditions leading up to Adamson law; effect of the law.

PARMELEE, J. H. *The trend of railway earnings in the year 1916.* Ry. Age Gaz., Dec. 29, 1916. Pp. 4.

Analysis of 1916, and forecast for 1917.

PAYEN, E. *Les résultats de l'exploitation des chemins de fer français.* L'Econ. Franç., Nov. 11, 1916. Pp. 2.

Comparison of 1913, 1914, and 1915.

PAYEN, E. *Les tarifs de chemins de fer l'étranger et en France.* L'Econ. Franç., Nov. 18, 1916. Pp. 3.

PENTON, J. A. *Observations—operation of transportation facilities and manufacturing activities in the Verdun region.* Pro. Ry. Club Pittsburgh, Nov. 24, 1916. Pp. 23.

PYLE, J. G. *The life of James J. Hill.* III. World's Work, Dec., 1916. Pp. 10.

The first two articles were mentioned in the December number of this REVIEW.

RAFFALOVICH, A. *Russia's railroads before, during, and after the war.* Econ. Wld., Jan. 6, 1917. Pp. 5.

Translation of an article in *L'Economiste Française* for December 2, 1916.

RIPLEY, E. P. *How I got customers to see my side.* Railroad Men, Dec., 1916. Pp. 6.

By the president of the Santa Fé System.

ROBBINS, E. C. *The trainmen's eight-hour day.* Pol. Sci. Quart., Dec., 1916. Pp. 17.

The first of a series of two historical articles on the eight-hour developments of 1916 on the railways.

SAKOLSKI, A. M. *Railroad operating expenses and property values.* Journ. Account., Aug., 1916. Pp. 12.

SINSHEIMER, P. A. *Commission government. II. Public utility regulation in California.* Outlook, Sept. 6, 1916. Pp. 4.

SISSON, F. H. *Investment and economic aspects of the "eight hour law" for railroads.* Trust Companies, Oct., 1916. Pp. 3.

A plea for "American fair play" for the railways.

THOM, A. P., ADAMSON, W. C., and VAN HISE, C. E. *A clinic on the railroad situation.* Nation's Business, Dec., 1916. Pp. 4.

THOMPSON, W. S. *Railway publicity.* Pro. Canadian Ry. Club, Oct., 1916. Pp. 10.

TRUMBULL, F. *The Adamson law: the employers' viewpoint.* Pro. Acad. Pol. Sci., Jan., 1917. Pp. 6.

UNDERWOOD, O. W. *Why I believe the Interstate Commerce Commission should have power to fix wages and hours of labor on interstate carriers.* Ann. Am. Acad., Jan., 1917. Pp. 8.

VANDERLIP, F. A. *Opportunity and responsibility of the railroad man.* Ry. Age Gaz., Nov. 10, 1916. Pp. 4.

VAN HISE, C. R. *The railroad hours of labor law.* Ann. Am. Acad., Jan., 1917. Pp. 9.

VAN HISE, C. R. (See entry under THOM, A. P.)

VAUGHT, C. H. *The economic value of the railway surgeon to the railways and other corporations employing labor.* Ry. Surgical Journ., Oct., 1916. Pp. 5.

VOGEL, R. *Berechnung der Selbstkosten im Durchgange- und Nahgüterverkehr.* Archiv f. Eisenbahnw., Nov.-Dec., 1916. Pp. 10.

Technical mathematical study of the relation between operating and interest costs, and applicability to different classes of service (local and through freight, etc.).

WATKINS, E. *Federal versus state regulation of railroads.* Case & Comment, Oct., 1916. Pp. 6.

WILCOX, D. F. *Shall the Interstate Commerce Commission and the state public utility commissions fix wages on the railroads and on local public utilities?* Ann. Am. Acad., Jan., 1917. Pp. 10.

Suggests collective bargaining and arbitration, with final appeal to the commissions.

YOUNG, J. T. *Government arbitration and mediation.* Ann. Am. Acad., Jan., 1917. Pp. 12.

Strongly advocates arbitration, with a period of compulsory investigation and public report if necessary.

The Adamson law before the Supreme Court. Ry. Age Gaz., Jan. 12, 1917. Pp. 3.

Summary of government and railway briefs.

British railways in 1916. S. African Rys. & Harbours Mag., Dec., 1916. Pp. 4.

Cars and locomotives ordered in 1916. Ry. Age Gaz., Dec. 29, 1916. Pp. 12.

Purchases of locomotives and freight cars larger than in 1915; of passenger cars, smaller.

Electric railway statistics. Elec. Ry. Journ., Jan. 6, 1917. P. 1.

History of locomotive development. Pro. Engrs. Club Philadelphia, Nov., 1916. Pp. 12, illus.

Italy's new and better railroad organization. Ry. Age Gaz., Jan. 12, 1917. Pp. 4.

War organization of Italian railways.

New electric railway track built in 1916. Elec. Ry. Journ., Jan. 6, 1917. Pp. 2.

Mileage built in 1916 was 744 miles, the smallest number on record.

Power of the government of the United States to own and operate railroads, etc. Va. Law Register, Apr., 1916. Pp. 12.

Protest against the federal valuation. Ry. Age Gaz., Dec. 15, 1916. Pp. 3.

Analysis of protests filed by Atlanta, Birmingham & Atlantic and Texas Midland railways as to results of physical valuation of their properties.

Railway construction statistics for 1916. Ry. Age Gaz., Dec. 29, 1916. Pp. 7.

New mileage built during 1916 was 1,098 miles, the smallest since 1864, excepting 1915.

Railway situation at close of year 1916. Ry. Age Gaz., Dec. 29, 1916. Pp. 4.

Resemblances to and contrasts with 1906.

Receiverships and foreclosure sales. Ry. Age Gaz., Dec. 29, 1916. Pp. 3.

Mileage in hands of receivers on December 31, 1916, amounted to 34,559 miles.

State control of Irish railways. Ry. News, Dec. 23, 1916. P. 1.

Irish railways taken under Government scheme of war operation as of December 16, 1916.

Les chemins de fer espagnols et la guerre. Journ. des Trans., Oct. 21, 1916. Pp. 2.

Les chemins de fer de Grèce. Bulletin des Transports Internationaux par Chemins de Fer, publié par l'Office Central à Berne, Dec., 1916. Pp. 12.

Accounting

(Abstracts by Martin J. Shugrue)

BENTON, J. E. *Commission valuation for rate purposes.* Elec. Ry. Journ., Oct. 14, 1916. Pp. 5.

Origin of fair value rule. Cites cases allowing going value when actual costs are proved. Makes plea for free presentation of facts by companies.

BUTTERFIELD, B. F. *Logic of municipal fund accounts.* Journ. Account., Nov., 1916. Pp. 6.

Considers the question of fund or appropriation accounts and explains how these accounts should show something more than merely the cash receipts and disbursement of city administrators.

CARVER, H. E. *Continuous inventories—their value and preparation.* Elec. Ry. Journ., Nov. 18, 1916. Pp. 2.

Four general groups of property suggested, with forms and methods of collecting and recording data.

CLARK, E. S. *Practical costs.* Indus. Management, Dec., 1916. Pp. 6½.

First article of a series. Begins with balance sheet, and by analysis traces the various elements through the office into the factory and finally back to the fiscal balance sheet at the close of a period.

DUNN, H. *Accounting inconsistencies and fallacies.* Elec. Ry. Journ., Oct. 14, 1916. Pp. 2½.

Criticises commission provisions for appropriation accounts, sinking fund reserves, amortization of debt, discount and expense, and other points.

FARNHAM, D. T. *Fixing profits graphically.* Engg. Mag., Oct., 1916. Pp. 7.

The graphic presentation of profits and their determining factors and how the practise may be standardized. Illustrated.

FOREMAN, A. E. *Keeping cost data on municipal work carried out by day labor.* Canadian Engr., Dec. 14, 1916. Pp. 4.

GRISWOLD, E. H. *Fundamentals of investment securities accounting.* Journ. Account., Nov., 1916. Pp. 5.

Most security selling firms have inadequate accounting systems. Outlines essential facts that such systems should show.

HOLLOWAY, C. B. *Tanning industry accounting.* Journ. Account., Jan., 1917. Pp. 5.

Basic methods in devising and installing a system of accounting for a tanning plant.

JONES, W. E. *The work of the statistician.* Elec. Ry. Journ., Oct. 14, 1916. Pp. 2.

Separate branch to handle electric railway statistical work is a step in the right direction. Examples of work of a statistician.

KEALY, P. J. *Overhead charges in valuation work.* Elec. Ry. Journ., Oct. 14, 1916. Pp. 6.

Only charges directly associated with the cost of reproducing physical and corporate elements of property are discussed. What charge should not be depreciated.

KLOTZ, R. G. *The principles of depreciation accounting.* Indus. Management, Nov., 1916. Pp. 12.

Critical survey of three primary methods: the "straight line," the "sinking fund," and the "reinvested sinking fund" methods. Illustrated with charts.

KNOEPPPEL, F. J. *Industrial accounting.* VI. Journ. Account., Nov., 1916.

True net operating efficiency is due to conservation of assets as well

as utilization of energy, and its correct expression calls for a portrayal of cost (economy) efficiency as well as production (energy) efficiency.

LILL, T. R. *Treatment of depreciation in railway income statements.* Journ. Account., Jan., 1917. Pp. 5½.

Why depreciation now required by the Interstate Commerce Commission to be included as a part of the operating expenses of railroads should be eliminated therefrom and shown as a separate item of expense.

LOEBENSTEIN, J. *Growth and depreciation.* Elec. Ry. Journ., Nov. 18, 1916.

Manner of company's growth affects per cent condition. Property does not settle down to fixed per cent condition.

MASON, J. K. *Synthetic costs.* Engg. Mag., Oct., 1916. Pp. 4.

In the determination of unit costs synthesis is the first principle; method and detail must adhere to it to be consistent.

MINER, E. J. *Salmon industry accounting.* Journ. Account., Nov., 1916.

Describes the essential features of the system of a company operating on a large scale. Illustrated with six exhibits.

MIXTER, G. W. *The operating value of cost systems.* Iron Age, Oct. 26, 1916.

PATON, W. A. *Theory of the double-entry system.* Journ. Account., Jan., 1917. Pp. 20.

The essence of the double-entry system is the separation of the members of the equation "property equals equities," and the maintenance of this equation.

PIEZ, C. *The relation between perpetual inventory value and appraisal value.* Journ. Am. Soc. Mechanical Engrs., Dec., 1916.

SAKOLSKI, A. M. *The progress of federal valuation of railroads.* Am. Econ. Rev., March, 1917. Pp. 6.

SHEPARD, R. B. *How should abandoned property be valued?* Engg. Record, Oct. 21, 1916.

SMITH, M. A. *A rule for testing the tax valuations of railroads.* Am. Econ. Rev., March, 1917. Pp. 15.

VILLARD, H. G. *Capital and revenue accounts in Canadian public finance.* Econ. Wld., Dec. 23, 1916. Pp. 2.

Explains methods of distinguishing between capital and revenue expenditures in Canadian public finance.

WILDMAN, J. *Accounting and modern industry.* Elec. Ry. Journ., Oct. 14, 1916. Pp. 2.

Accounting has played and is playing an important part in industrial development. How accounting can serve administration.

WOLFF, M. *Interpretation of water works accounts.* Journ. Am. Water Works Assoc., Sept., 1916. Pp. 5.

Discussion of problems in accounting for water works.

The accounting and reporting methods of the state of New York. Munic. Research, June, 1916. Pp. 212

1. Laws and practices affecting accounting and reporting. 2. A description of the financial reports of the state of New York. 3. The accounting and reporting methods of the state comptroller's office. Appendix, forms for reporting state finances.

Cost system for manufacturers. Pace Student, Oct., 1916. Pp. 3.

In this issue and succeeding issues is reprinted, with a few abridgements, the text of the Federal Trade Commission's pamphlet on *Fundamentals of a Cost System*, with comments on various points of particular interest.

Restaurant costs. Pace Student, Dec., 1916. Pp. 3.

The advance in the cost of food brings many professional problems to the accountant for solution.

Investments

(Abstracts by Arthur S. Dewing)

ANDERSON, G. B. *The effect of the war on new security issues in the United States.* Ann. Am. Acad., Nov., 1916.

Indicates transition from debtor to creditor nation. Intimates that American corporations, particularly railroads, suffered because of foreign financing.

BONN, N. Y. *Naturalization of capital.* Ann. Am. Acad., Nov., 1916.

War has dealt a deadly blow to the neutrality of international finance.

CHAPIN, A. B. *Municipal bonds over the counter and in small denominations.* Nat. Munic. Rev., Oct., 1916.

First figures give significant statistics indicating relative necessity of different classes of investments available for trust funds; shows municipalities safest and bank stocks least. Does not approve of sales over the counter.

FISHER, I. *Rate of interest after war.* Ann. Am. Acad., Nov., 1916.

Asserts that interest rates in Europe will be higher after the war, those in United States tend to rise.

GUYOT, Y. *Caractère des placements français avant la guerre.* Journ. des Econ., Dec., 1916.

Suggests the great inherent strength of the French investment situation and emphasizes that the greatest value for capital now and after the war is in production enterprise at home.

HOBSON, C. K. *British oversea investments, their growth and importance.* Ann. Am. Acad., Nov., 1916.

These investments have somewhat contracted, due to war, but much withdrawn from the Americas loaned to the allies, especially Russia.

HUEBNER, S. S. *The American security market during the war.* Ann. Am. Acad., Nov., 1916.

Brief and clear statement. Correctly distinguishes between "war stocks" and "the balance of the market" and makes few sweeping generalizations.

KEMNERER, E. W. *The theory of foreign investments.* Ann. Am. Acad., Nov., 1916.

The mechanism and impediments to foreign investment.

LAWSON, W. R. *The British treasury and the London stock exchange.* Ann. Am. Acad., Nov., 1916.

Deprecates interference of the government in the operations of the exchanges. Contains a striking sentence: "Publicity is the keynote of American finance; secrecy is the British keynote."

LOUGH, W. H. *Needs for capital in Latin America.* Ann. Am. Acad., Nov., 1916.

A brief summary of specific investment conditions in each of the principal central and South American countries.

McROBERTS, S. *Russia's future needs for capital.* Ann. Am. Acad., Nov., 1916.

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ROBERTS, G. E. *America's ability to make foreign investments.* Ann. Am. Acad., Nov., 1916.

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SALIERS, E. A. *The war and the International Mercantile Marine Company.* Journ. Pol. Econ., Dec., 1916.

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SKELTON, O. D. *Canadian capital requirements.* Ann. Am. Acad., Nov., 1911.

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WILCOX, D. F. *The future of public utility investments.* Ann. Am. Acad., Nov., 1916.

WILLIAMS, T. T. *Fluctuations in the prices of securities.* Bengal Econ. Journ., Sept., 1916.

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WILSON, H. *The relation of government to foreign investment.* Ann. Am. Acad., Nov., 1916.

The government should, for political reasons, guide rather than control foreign investments.

WOLFE, S. H. *A suggestion for a modified form of amortization with a brief memorandum of the applicability of that principle to the bonds of miscellaneous companies.* Econ. Wld., Nov. 4, 1916.

Suggests the amortization of premiums—and presumably discounts—at an assessed and uniform rate. An able treatment of a very knotty problem

YOUNGMAN, E. H. *Short-term investments as a stabilizing influence in international finance.* Ann. Am. Acad., Nov., 1916.

Contains computation showing \$1,500,000,000 foreign short-term obligations. These will give us a strong strategic position after war and a shield against attack on our gold reserves.

Number of stockholders falls as prices rise. Annalist, Jan. 1, 1917.

A remarkable statistical compilation showing the above statement true. May show that investors do sell out at the top to speculators—contrary to the latter's complacent assumption.

Utility bonds for savings banks. Elec. Ry. Journ., Oct. 28, 1916.

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"Ifs" and "ands" of foreign war bonds. World's Work, Dec., 1916.

General uncertainty attaching to these securities, based on the present unusual situation.

Labor and Labor Organizations

(Abstracts by George E. Barnett)

ASHTON, T. S. *The relation between unemployment and sickness.* Econ. Journ., Sept., 1916. Pp. 5.

The high correlation between sickness and unemployment shown by the record of the Amalgamated Society of Engineers is attributed chiefly to malingering.

BERRIS, A. J. *Metal trades department.* Am. Federationist, Oct., 1916. Pp. 12. Historical and descriptive.

McCABE, D. *Arbitration awards under the Erdman and Newlands acts.* Am. Econ. Rev., March, 1917. Pp. 3.

CARTER, G. B. *The triple alliance of labour.* Econ. Journ., Sept., 1916. Pp. 15.

The significance of the alliance between the Miners' Federation, the Railwaymen, and the Transport Workers.

CLARK, L. D. *When a railroad employee is hurt: the legal tangle.* Journ. Pol. Econ., Oct., 1916. Pp. 6.

Considers various proposals to clear up the uncertainty as to the jurisdiction of the state and federal governments.

CONWAY, T., JR. *Solving the labor problem in Philadelphia.* Elec. Ry. Journ., Nov. 4, 1916. Pp. 5.

The results of the coöperative plan introduced in 1911 by the Philadelphia Rapid Transit Company.

EDWARDS, J. W. *Industrial diseases of iron and steel workers in Middlesbrough.* I. & C. T. R., Aug., 1916.

GIRALDONI, A. *Un nuovo istituto giuridico sociale in formazione: Partecipazione sociali di lavoro costituite mediante ultrasalari.* Riv. Intern., Sept. 30, 1916. Pp. 13.

The first instalment of a study of a form of profit sharing.

GLEASON, C. J. *A living wage by legislation and the Oregon experience.* Commonwealth Rev., July, 1916. Pp. 35.

Hoxie, R. F. *Scientific management and labor welfare*. Journ. Pol. Econ., Nov., 1916. Pp. 20.

Scientific management and labor tends to narrow craft knowledge. The remedy is industrial education.

Hoxie, R. F. *Why organized labor opposes scientific management*. Quart. Journ. Econ., Nov., 1916.

Scientific management looks to constant change; unionism to fixity and uniformity.

Ogburn, W. F. and Kelly, E. *Wages in American cities*. Quart. Pubs. Am. Stat. Assoc., Sept., 1916. Pp. 5.

The cities are ranked on the basis of trade union wage rates.

Schlesinger, B. *Protocol in the dress and waist industry*. Am. Federationist, Nov., 1916. Pp. 3.

Brief account of the 1916 agreements.

Shadwell, A. *The welfare of factory workers*. Edinburgh Rev., Oct., 1916.

Sullivan, J. W. *British union labor in war time*. Am. Federationist, Oct.-Nov., 1916. Pp. 8, 9.

Tracy, T. F. *History of the union label trades department of the A. F. of L.* Am. Federationist, Dec., 1916, Jan., 1917. Pp. 7, 9.

Unden, O. *Lagförslaget om arbetstvister*. Ek. Tids., No. 9, 1916. Pp. 13.

A favorable account of the proposed labor dispute legislation in Sweden.

The intellectual failure of the trade unions. New Statesman, Sept. 2, 1916.

The English unions can face the urgent problems growing out of the war only by the creation of a General Staff.

Job selling in industrial establishments in Ohio. Mo. Rev., U. S. Bureau Labor Stat., Oct., 1916. Pp. 5.

Abstract of a report of the Ohio Industrial Commission.

A mighty stride for the right—the 1916 A. F. of L. convention. Am. Federationist, Jan., 1917. Pp. 9.

Outline of the more important matters considered.

Piecework. New Statesman, Sept. 23, 1916. Pp. 2.

Suggestions with reference to the solution of the problem in the engineering trades.

Proposed changes in Canadian industrial disputes investigation act. Mo. Rev. U. S. Bureau Labor Stat., Dec., 1916. Pp. 2.

The chief changes proposed in the tentative draft submitted by the Canadian Department of Labour are designed to prevent delays in the procedure.

Some inside workings of the B. of L. E. Ry. Age Gaz., Nov. 10, 1916.

Testimony recently given before the examiner of the I. C. S. as to pressure exercised on members to favor high-power head lights on locomotives.

Some new studies of industrial fatigue. Mo. Rev. U. S. Bureau Labor Stat., Dec., 1916. Pp. 8.

Brief abstract of recent reports by a committee of the British A. A. S. and by the Health of Munition Workers' Committee.

Money, Prices, Credit, and Banking

(Abstracts by Chester A. Phillips)

AGGER, E. E. *Educational campaign concerning commercial paper.* Am. Econ. Rev., March, 1917. Pp. 2.

BABSON, R. W. *The rural credit act and its effect on the investment market.* Ann. Am. Acad., Nov., 1916. Pp. 9.

A summary statement of the main features of the act and the conditions which led to its passage. New farm loan bonds will compete chiefly with low-yielding high-grade industrial and government securities.

BONN, M. J. *The fall in German exchange.* Quart. Journ. Econ., Nov., 1916.

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CASSEL, G. *The present situation of the foreign exchanges.* II. Econ. Journ., Sept., 1916. Pp. 5.

A study in inflation.

D. D. *De skandinaviska centralbankernas sedelutgifning och guldskassar.* Ek. Tids., No. 5, 1916. Pp. 3.

A statistical account of the note issue and gold reserves of the central banks in the Scandinavian countries.

FERRIN, A. W. *The Morris plan of industrial loans and investments.* Moody's Mag., Oct., 1916. Pp. 2.

Origin, operation, and widespread success of the Morris banks, which are alleviating distress, eliminating the loan shark and making money for their shareholders.

FREDELIUS, H. *Om sparbanksrörelsen i Sverige under åren 1911-1914.* Ek. Tids., No. 3, 1916. Pp. 11.

A study of savings bank statistics in Sweden, 1911-1914.

GARNETT, P. *The history of the trade dollar.* Am. Econ. Rev., March, 1917. Pp. 8.

HAMLIN, C. S. *The federal reserve act.* Journ. Account., Nov., 1916. Pp. 9.
The benefits of the system.

HULTMAN, I. *Andringar i lagen för Norges bank.* Ek. Tids., No. 9, 1916. Pp. 6.

A criticism of recent changes in the Norwegian banking law regulating note issue.

KEESING, L. *Gold's actual status.* Annalist, Nov. 13, 1916. P. 1.

Uncertainty as to the future monetary standards of the fighting nations. Gold may be dethroned.

KEMMERER, E. W. *Six years of postal savings in the United States.* Am. Econ. Rev., March, 1917. Pp. 45.

LEWIS, G. *The growth of acceptance business.* Journ. Am. Bankers Assoc., Dec., 1916. Pp. 3.

The merits of the acceptance. The growth of bankers' and trade acceptances.

MILLER, A. C. *The federal reserve system: looking ahead.* Econ. Wld., Nov. 4, 1916. Pp. 4.

An urgent invitation to member banks of the federal reserve system to keep a large part of their gold holdings in the regional banks.

MILLER, A. C. *Our golden problem.* Annalist, Annual Review, 1916. Pp. 3.

Impounding of gold in federal reserve banks as means of minimizing inflation and of preventing an embarrassing foreign drain of gold after the war.

OPPENHEIM, A. *Foreign exchange: today's topic, today's opportunity.* Moody's Mag., Nov., 1916. Pp. 8.

The disturbing influence of the war on foreign exchange and the resulting investment and speculative possibilities in connection with foreign bills and bonds.

PALGRAVE, R. H. I. *Trade banks.* London Bankers' Mag., Dec., 1916. Pp. 7.

Advocates their establishment.

PLUMP, A. H. *A western view of the federal farm loan act.* Am. Bldg. Assoc. News, Dec., 1916. Pp. 4.

A somewhat unfair criticism of the measure by a friend of the Building and Loan Association.

POWNALL, G. H. *A financial survey, inaugural address of the President of the Institute of Bankers.* Journ. Inst. Bankers, Dec., 1916. Pp. 29.

A defence of the English banking system.

RAFFALOVICH, A. *La Banque D'Allemagne en 1915.* L'Econ. Franç., Nov. 25, 1916. Pp. 3.

An interesting analysis of the report of the president of the Reichsbank to the shareholders, March, 1916.

RAFFALOVICH, A. *The British trade bank.* Journ. des Econ., Nov. 15, 1916. Pp. 9.

The writer, like English bankers, is not enthusiastic about the project.

DE RIBES-CRISTOPLE. *La Banque de France. Les raisons de renouveler son privilège.* Monde Econ., Dec. 2, 1916. Pp. 7.

Historical sketch of former renewals of the charter of the Bank. The services of the Bank during the war: a 1 per cent loan of 9 billion francs to the state to meet the expenses of mobilization during 1914 and 1915; liberal extension of credit to other institutions at outbreak of war prevented a panic; loan of 500 million francs to the State Bank of Russia to take up the Russian paper left in the French market. In the future the Bank will furnish capital for building up

the wastes of war and for modernizing industry. There promises to be no opposition to a renewal of the charter on essentially the same terms as before.

ROBERTS, J. V. *Rural credits*. Am. Bldg. Assoc. News, Oct., 1916. Pp. 7.

A critical account of the federal farm loan act.

ROBINSON, E. L. *One hundred years of savings banking*. Econ. Wld., Oct. 14, 1916. Pp. 4.

ROVENSKY, J. E. *The manner in which our financial relations with European countries are maintained*. Econ. Wld., Dec. 2, 1916. Pp. 3.

An important description of our present financial and exchange relations with the belligerent and Scandinavian countries.

SHAIRP, L. V. *Municipal savings banks*. Charity Organ. Rev., Nov., 1916.

The municipal savings banks (War Loan Investment) act, passed in August, 1916, provides for the establishment in England and Scotland of municipal banks for facilitating the investment of savings in securities issued for purposes of the present war.

SHEPPARD, R. L. *Standard schedule of charges for various kinds of trust company service*. Trust Companies, Dec., 1916. Pp. 5.

The desirability of standard charges for usual fiduciary services of trust companies. A basis for standardization is proposed.

VANDERLIP, F. A. *Our gold reserves after the war*. Ann. Am. Acad., Nov., 1916. Pp. 9.

European methods of controlling gold movements.

WAYNE, J., JR. *Exchange charges, country clearing houses and settlement of balances*. Bankers Mag., Oct., 1916. Pp. 5.

A banker's arraignment of the clearing plan of the federal reserve system.

WICKSELL, K. *The Scandinavian gold policy*. Econ. Journ., Sept., 1916. Pp. 6.

WILLIS, H. P. *The Philippine national bank*. Bankers Mag., Dec., 1916.

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ZIMMER, G. *Foreign exchange during the war*. Ann. Am. Acad., Nov., 1916. Pp. 10.

The part played by banks in agricultural economy in Kansas. Intern. Rev. Agri. Econ., Sept., 1916. Pp. 6.

The relation between a democratic, state banking system and the agricultural development of Kansas.

Post-office money order system and the extent of its business. Journ. Am. Bankers Assoc., Sept., 1916. Pp. 3.

The proposals for a British trade bank. Bankers' Mag. (London), Nov., 1916. Pp. 7.

Lord Faringdon and his distinguished committee urge the formation

of a privately owned bank, with official recognition, for the financing of long-time overseas business.

Reserve board can not confer trust company powers in Michigan. Journ. Am. Bankers Assoc., Nov., 1916. Pp. 5.

Will gold be dethroned? Annalist, Oct. 30, 1916. Pp. 2.

Arguments for and against the probability of the abandonment of the gold standard by the warring nations. Views of economists given in answer to queries.

Public Finance

(Abstracts by Charles P. Huse)

ADAMS, T. S. *The continual increase of public expenditures and taxes.* Econ. Wld., Dec. 16, 1916. Pp. 5.

Devotes particular attention to taxation of insurance companies.

BARRETT, G. E. *The new French loans.* Moody's Mag., Nov., 1916. Pp. 4.

Describes the recent French loans, especially the mechanism of the \$50,000,000 commercial credit arranged in New York for the benefit of French manufacturers.

BLAKEY, R. G. *The comparative cost of state government.* Am. Econ. Rev., March, 1917. Pp. 5.

BLAKEY, R. G. *Financial statistics of states.* Am. Econ. Rev., March, 1917. Pp. 2.

BORGATTA, G. *I profitti industriali e la pressione fiscale.* Rif. Soc., Aug.-Sept.-Oct., 1916. Pp. 25.

Taxes have been one factor, but only a secondary factor, in lowering corporate profits in Italy.

BRISMAN, S. *Det norska förslaget till skatt på oförtjänt jordecärdestegning.* Ek. Tids., No. 3, 1916. Pp. 4.

A criticism of legislation proposed in Norway to tax unearned increment.

BROWN, A. S. *French war finances.* Moody's Mag., Oct., 1916. Pp. 5.

Describes the economic and financial position of the French nation.

BULLOCK, C. J. *The taxation of property and income in Massachusetts.* Quart. Journ. Econ., Nov., 1916. Pp. 61.

A valuable account of the development of the Massachusetts tax system from earliest times to the enactment of the income tax of 1916.

CLARK, F. E. *The purposes of the indebtedness of American cities, 1880-1912.* Munic. Research, July, 1916. Pp. 72.

A valuable statistical analysis of the growth of municipal indebtedness. The high per capita debt of \$69 in 1880, due to the boom period culminating in 1873, declines to \$49 in 1890, and then rises to \$66 in 1904 and \$90 in 1912. Figures show that the per capita burden increases with the size of the city, that loans for productive purposes are

increasing in importance, and that the growth of the debt for education has been remarkable.

COLLINS, C. W. *The coming of the budget system.* S. Atlantic Quart., Oct., 1916. Pp. 19.

Describes the present wasteful system of federal appropriations and the proposed plan for a real budget.

CLEVELAND, F. A. *Results of New York City budget analyzed.* Record and Guide, Dec. 2, 1916.

DAVENPORT, H. J. *Theoretical issues of the single tax.* Am. Econ. Rev., March, 1917. Pp. 30.

DENBY, C. *The national debt of China—its origin and its security.* Ann. Am. Acad., Nov., 1916. Pp. 16.

A useful review of Chinese financial history, with particular attention to the national debt.

EDGEWORTH, F. Y. *British incomes and property.* Econ. Journ., Sept., 1916. Pp. 9.

Discusses a number of statistical problems relating to the British income tax found in Stamp's *The Application of Official Statistics to Economic Problems.*

HÖIJER, E. *Den budgetmässiga inkomstberäkningen i Sverige, Norge och Danmark.* Ek. Tids., no. 4, 1916. Pp. 29.

A comparative study of the budgets of Sweden, Norway, and Denmark, showing the expected and the realized amounts from certain sources of state income during the years 1890-1910.

JÈZE, G. *Les finances de guerre de l'Angleterre: les economies publiques de guerre.* Rev. Sci. Légis. Finan., July-Aug.-Sept., 1916. Pp. 111.

An interesting account of the progress made by the British government in securing economies. Considers such topics as foreign purchases, munition-making, and price limitations.

JÈZE, G. *Les finances de guerre de l'Italie.* Rev. Sci. Légis. Finan., July-Aug.-Sept., 1916. Pp. 30.

Describes Italy's financial resources and her methods of financing the war.

KAY, T. B. *The duties of the state treasurer, the state funds and how they are expended.* Commonwealth Rev., July, 1916. Pp. 3.

A brief statement of the finances of Oregon.

KENNEDY, J. T. *Dividends and the new income tax law.* Journ. Account., Jan., 1917. Pp. 4.

Takes up obscure points in the operation of the federal income tax.

LAGERQUIST, W. E. *Germany's war finances.* Moody's Mag., Nov., 1916. Pp. 6.

Describes the methods Germany has followed in financing the war, showing their elements of strength and weakness.

LAPP, J. A. *State administration and budget.* Governors' messages. Am. Pol. Sci. Rev., Nov., 1916. Pp. 6.

Gives proposals for budget reform made by governors of Rhode Island, Maryland, and New York.

LOLINI, E. *Il concetto di reddito in finanza ed in economia pura*. Riv. Ital. di Soc., May-Aug., 1916. Pp. 25.

MALBURN, W. P. *The tax dodger as the Treasury sees him*. Annalist, Jan. 8, 1917. Pp. 3.

The Assistant Secretary of the Treasury cannot accept Carl Snyder's estimate that 80 per cent of the people with taxable incomes escape the income tax.

MASCAREL, A. *Les familles terriennes et l'impôt progressif sur les successions*. Réf. Soc., Oct. 1, 1916. Pp. 26.

Progressive inheritance taxes, by forcing the sale of medium-sized landed estates, threaten the existence of the French landed family.

MUKHERJI, P. *State aid to industries*. Indian Journ. Econ., Apr., 1916.

An account of measures, in operation and contemplated, to improve the industrial position of India.

PAGE, T. W. *The movement for tax reform in Virginia*. Journ. Pol. Econ., Oct., 1916. Pp. 18.

A review of taxation in Virginia and the attempts at reform since 1900.

PISTOIESE, S. *Credito pubblico e privato nella finanza di guerra inglese*. Riv. di Sci. Banca, July-Aug., 1916. Pp. 10.

RAFFALOVICH, A. *Les finances de l'Empire allemand*. Journ. des Econ., Oct., 1916. Pp. 7.

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RIGHTON, C. E. *Recent progress in municipal budgets and accounts*. Concluded. Nat. Munic. Rev., Oct., 1916. Pp. 7.

Reviews progress in budget reform in American and Canadian cities.

RYAN, A. R. *Municipal assessments*. Canadian Munic. Journ., Oct., 1916.

Shows the advantages of the Somers system of assessment.

SCHMIDT, L. *Financial war policies of Germany*. Moody's Mag., Dec., 1916.

Deals chiefly with problems of foreign exchange and public credit.

SELWYN-BROWN, A. *Canadian government finance*. Moody's Mag., Nov., 1916.

A survey of Canadian finances, both of the dominion and the provinces, indicates that they are ably and conservatively managed.

SHAFER, C. W. *Grand Rapids budget system*. Munic. Journ., July 20, 1916.

SOYEDA, J. *The war and Japanese finance*. Econ. Journ., Sept., 1916. Pp. 9.

The depression existing the first year of the war has given way to prosperity, very much to the advantage of Japanese finances.

WHITE, J. D. *Land-value taxation and feu-duties*. Land Values, Oct., 1916.

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YOUNG, L. E. *Mine taxation in the United States*. Univ. Ill. Studies Soc. Sci., Dec., 1916.

Gives the historical accounts of the methods used by the federal and state governments in the taxation of mines.

ZOLLMANN, C. *Tax exemption of American Church property.* Mich. Law Rev., June, 1916.

Citizen agencies for research in government. Munic. Research, Sept., 1916. Pp. 114.

Describes the work done by such agencies for municipal research as the Philadelphia, Chicago, and Dayton bureaus and the Boston finance commission.

Land values conference held in Glasgow. Land Values, Dec., 1916. Pp. 11.

An account of the recent conference called to promote the taxation of land values.

New York City's individual income tax payment. Greater N. Y., Dec. 4, 1916. P. 1.

Gives interesting figures concerning federal income tax collections in New York state.

Street paving and gross earnings taxes. Stone & Webster Journ., Oct., 1916.

Believes Tacoma's policy in imposing charges upon its street railway is shortsighted.

Les nouveaux impôts projetés; l'impôt sur les bénéfices de guerre. L'Econ. Franç., Dec. 2, 1916. Pp. 3.

A brief summary of French war taxes with special reference to the tax on war profits.

La situation financière de la France après deux ans de guerre et les crédits pour la fin de l'exercice 1916. L'Econ. Franç., Sept. 16, 1916. Pp. 3.

A brief review of French war finances.

Housing

(Abstracts by James Ford)

BEAUREGARD, P. *L'importance de la question des loyers.* Monde Econ., Nov. 25, 1916. Pp. 2.

Compares number of rented quarters for 1871 and 1915 and discusses moratorium briefly.

BOGARDUS, E. S. *The house-court problem.* Am. Journ. Soc., Nov., 1916. Pp. 9.

Analysis of 1202 house-courts in Los Angeles.

CULPIN, E. G. *Housing organization.* II. Garden Cities & Town Planning, Oct., 1916. Pp. 9.

Housing at first Garden City, Letchworth.

FORD, G. B. *How New York City now controls the development of private property.* City Planning, Oct., 1916. Pp. 6.

Describes zoning law of New York City.

FORD, G. B. *Town planning New York.* Garden Cities & Town Planning, Oct., Nov., 1916. Pp. 6.

Zoning by heights, area, and use.

FORD, JAMES. *Bibliography of tuberculosis in its relation to house inspection and housing betterment.* Am. Journ. Pub. Health, Dec., 1916. Pp. 8.

Lists 150 titles of articles from the English, French, and German, and submits comments concerning the more important.

IHLDER, J. *Hopewell, a city eighteen months old.* Survey, Dec. 2, 1916. Pp. 5.

Study of the rapid development of a Virginia munitions manufacturing town.

MULLER, A. F. *How Kenosha is solving its housing problem.* Am. City, Nov., 1916. Pp. 3.

Methods of the Kenosha Homes Company in Wisconsin.

NICHOLS, J. C. *City planning and real estate development.* Landscape Architecture, Oct., 1916. Pp. 9.

Economic importance of street planning.

OLMSTED, F. L. and others. *Building lines.* Landscape Arch., Oct., 1916. Pp. 5.

Argument for building lines in Brookline, Massachusetts.

RÖGIND, S. *Kjöbenhavnske Boligforhold.* Nat. ök. Tids., July-Oct., 1916. Pp. 33.

Study of the lack of housing accommodations in Copenhagen. It is acute in all three Scandinavian countries at the present time, largely because of war conditions and war prices.

VEILLER, L. *The relation of housing to the public health movement.* Am. Journ. Pub. Health, Nov., 1916. Pp. 5.

Urges establishment of "housing bureau" in health departments.

WARREN, H. *The five-per-cent limit.* Garden Cities & Town Planning, Nov., 1916. Pp. 3.

The interest limit for housing companies should be raised because of prevalent high interest rate.

Building restrictions in New York City. Landscape Arch., Oct., 1916. Pp. 7.

Insurance and Pensions

(Abstracts by Henry J. Harris)

BALDWIN, F. S. *A protest from the manager of the New York state insurance fund.* Econ. Wld., Oct. 21, 1916. P. 1.

The temporary suspension of dividends by the fund was caused by an increase of accidents due to the unusual industrial activity of the period.

BELLOM, M. *The illusion of a profit for the state from a monopoly of fire insurance.* Econ. Wld., Oct. 21, 1916. Pp. 3.

The project of creating a state fire insurance monopoly in France for the purpose of providing additional revenue to meet war costs should be rejected for reasons of insurance principle and practice.

COX, H. C. *A decade of business progress in Canada, with particular reference to life insurance.* Econ. Wld., Dec. 23, 1916. Pp. 3.

Canada has promptly met all financial obligations; has endeavored to promote life insurance.

DAY, W. A. *Group insurance*. Econ. Wld., Dec. 16, 1916. Pp. 3.

Supplements individual insurance and protects the worker in a manner to benefit the employer and society.

DOWNNEY, E. H. *The organization of workmen's compensation insurance*. Journ. Pol. Econ., Dec., 1916. Pp. 33.

Fundamental types of carriers are state, mutual, and stock. The competitive organization is inappropriate to work-accident insurance; from the standpoint of social utility, the case for monopoly is fairly overwhelming. The choice lies between compulsory state and compulsory mutual insurance.

ERSKINE, J. B. *The United States Steel and Carnegie pension fund*. Econ. Wld., Dec. 9, 1916. Pp. 2.

Description of fund and data as to operations of benefits for retirement, death, and accident.

FACKLER, D. P. *The desirability of increasing the sale of annuities in the United States*. Econ. Wld., Oct. 28, 1916. Pp. 2.

Suggests changing the basis of annuity reserves from $3\frac{1}{2}$ to 4 or even $4\frac{1}{2}$ per cent to make annuities more attractive.

FRANKEL, L. K. *Some fundamental considerations in health insurance*. Econ. Wld., Dec. 9, 1916. Pp. 3.

Suggests plan for federating health insurance carriers, with the view of larger preventive work.

HARDISON, F. H. *Unsettled problems*. News Letter (Ins. Soc. of N. W.), Oct., 1916. Pp. 8.

These are: taxation of insurance companies, coöperative rate-making in fire insurance, over-insurance, agents' commissions.

HARPER, E. R. *How far should a life insurance company go toward conserving the lives of its policyholders?* Econ. Wld., Sept. 30, 1916. Pp. 2.

There should be no limit of a company's efforts in life conservation, but coöperation offers wider opportunities.

HAWKHURST, A. *Insurance from a merchant's viewpoint*. News Letter (Ins. Soc. of N. Y.), Oct., 1916. Pp. 8.

HUNTER, A. *Social insurance: its general meaning and its meaning for this country*. Econ. Wld., Nov. 11, 1916. Pp. 5.

General review of accident, health, invalidity, old age and unemployment insurance, with recommendations to actuaries to participate in the movements for these forms of insurance in order to put them on a scientific basis.

HUNTER, A. and ROGERS, O. H. *The need in medical selection of standards by which to measure border-line risks*. Econ. Wld., Nov. 25, 1916. Pp. 3.

Plea for the adoption of a system of rating factors for insurance on lives which are below standard. Describes method of using trained lay clerks in the valuation of lives for insurance.

MANSFIELD, B. *The relation of government to our economic and social interests, with especial reference to insurance*. Econ. Wld., Sept. 30, 1916. Pp. 3.

Government regulation, state operation, and social insurance.

MEEKER, R. *The conference on social insurance*. Mo. Rev. U. S. Bureau Labor Stat., Jan., 1917. Pp. 5.

Resumé of conference in Washington, December 5-9, 1916. Conference succeeded in making progress toward agreement on the broad principles of social insurance.

MOORE, R. F. *Failures of life insurance companies in the United States*. Econ. Wld., Oct. 14, 1916. P. 1.

Southern companies have had better record than other sections.

MORTIMER, J. D. and others. *Social relations of electric railways*. Elec. Ry. Journ., Oct. 21, 1916. Pp. 9.

Report of committee of American Electric Railway Association on life, health, and accident insurance for employees on electric railways. Interesting diagrams of experience of typical companies.

NESBIT, C. F. *Reserves of fire insurance companies*. Econ. Wld., Oct. 14, 1916. Pp. 4.

Reserves should be fixed independently of premiums and should be calculated on the basis of the risk assumed.

RHODES, E. E. *The income tax section of the new federal reserve law as it affects life insurance*. Econ. Wld., Nov. 4, 1916. Pp. 2.

Explanation of new features of tax on corporations and comparison with former provisions.

RIEGEL, R. *Classification, regulation and coöperation in fire insurance rate-making*. Econ. Wld., Oct. 7, 1916. Pp. 3.

Summary of articles in *Quarterly Journal of Economics*. See previous issues of AMERICAN ECONOMIC REVIEW.

ROWE, J. S. *The demonstrated vices and weaknesses of public mutual (state fund) workmen's compensation insurance*. Econ. Wld., Dec. 30, 1916. Pp. 4.

Adverse criticism of organization and administration of state funds of Washington, Ohio, West Virginia, New York, Pennsylvania, and California.

RYAN, H. E. *The experience rating plan of the Ohio State Insurance Fund for workmen's compensation*. Econ. Wld., Oct. 7, 1916. Pp. 2.

Statement in brief form of Ohio plan.

SCHNITZLER, F. *Determination of consequences of industrial accidents in Austria*. Mo. Rev. U. S. Bureau Labor Statistics, Dec., 1916. Pp. 37.

Austrian accident insurance law provides compensation based on decrease of earning power due to the injury. Estimate of the decrease is made by officials of the system, with an appeal to courts of arbitration. Decisions made in about 100 cases are analyzed.

SHARPE, D. R. *Friction in the working of the national insurance act*. Charity Organ. Rev., Dec., 1916. Pp. 8.

Cases assisted by the London C. O. S.

Actuary Albert H. Mowbray on the rising tendency of the industrial accident rate. A letter from Dr. Frederick L. Hoffman on the variation of the industrial accident rate. Econ. Wld., Nov. 18, 1916. Pp. 3.

The increase in accident frequency in boom times is due not so much to the introduction of new employees, as to a lower grade of employees. Hoffman suggests that temporary periods of exceptional industrial activity are not likely to disturb the general average.

Coöperative agricultural insurance in Germany and Switzerland. Daily Commerce Repts., Jan. 6, 1917. Pp. 9.

Organization and operation of mutuals providing hail and livestock insurance.

Death rates and average age at death among members of certain trade-union benefit funds. Mo. Rev. U. S. Bureau Labor Stat., Jan., 1917. Pp. 8.

Summary of data collected from records of unions, partly drawn to 1915.

The encouraging downward tendency of the general and the industrial accident mortality rate in the United States. Econ. Wld., Oct. 28, 1916. Pp. 2.

Summary of studies by F. L. Hoffman.

Fire insurance in Uruguay. Daily Commerce Repts., Jan. 9, 1917. Pp. 2.

Legal regulation, fees, etc., and operations of individual companies in 1913-1915.

History and present status of insurance in Japan. Econ. Wld., Dec. 2, 1916. Pp. 3.

State supervision began in 1900. Post office controls industrial life insurance.

Insurance—an aid to efficiency. Annalist, Dec. 25, 1916. P. 1.

Account of insurance system of Union Pacific Railway providing benefits for death, accident, and sickness.

Insurance companies in Greece. Daily Commerce Repts., Nov. 2, 1916. P. 1.

Business of life, marine, and fire companies in 1915.

Insurance legislation in Bolivia. Daily Commerce Repts., Jan. 5, 1917. P. 1.

Text of law of 1904 covering all forms of insurance.

National insurance acts. The departmental committee's interim report. Journ. Inst. Actuaries, Oct., 1916. Pp. 25.

Review of interim report of departmental committees on approved society finance and administration. This report recommends postponing the date when increase of benefits is to occur, in order to provide larger present income.

Social insurance in Germany: statistics of operation, 1914. Mo. Rev. U. S. Bureau Labor Stat., Jan., 1917. Pp. 3.

Data from recent official publications on accident and invalidity insurance.

The war pensions act, 1915. Charity Organ. Rev., Oct., 1916. Pp. 8.

Difficulties encountered in administration of the act.

Women in industry. Am. Labor Legis. Rev., Dec., 1916. Pp. 62.

Summarizes provisions for maternity benefits and insurance in leading countries.

Pauperism and Charities

(Abstracts by F. D. Watson)

LANE, W. D. *At the bar of childhood*. Survey, Feb. 12, 1916.

Testimony concerning the disgraceful conditions in some private institutions in and about New York City, brought out in the investigation of the state charities law.

LANE, W. D. *Charity patchwork and a program*. Survey, Nov. 25, 1916.

A review of the report of Charles H. Strong's special inquiry, at the request of Governor Whitman, into the theory and practices of New York's state administration of charities. The report goes to the fundamentals of charity work as an essential of government. It recommends abolishing five overlapping and underworking offices and commissions and setting up a supervisory board broadly equipped to do its work.

LANE, W. D. *A rich man in the poorhouse*. Survey, Nov. 4, 1916.

An account of the remarkable reforms accomplished in the management of the public charities of Westchester County New York under V. Everit Macy who for three years has been superintendent of the poor.

NORMAND, J. *L'assistance publique à Paris*. L'Econ. Franç., Nov. 4, 1916.

The effect of the war on public assistance in Paris, showing the increased expenditures and other necessary adjustments.

PRICE, E. C. *The war charities report*. Charity Organ. Rev., Aug., 1916.

A resumé of the report of the committee on war charities recently appointed by the Home Secretary of England to consider representations which have been made in regard to war charities and to advise whether any measures should be taken to secure better supervision of such funds in the public interest. The committee made a number of recommendations based largely on the principle of the compulsory registration of all such charities.

NOTES

Since December 1, 1916, the following names have been added to the membership of the American Economic Association:

Ackland, Richard E., 52 N. Fourth St., Columbus, Ohio
Alworth, Marshall W., 1607 Alworth Bldg., Duluth, Minn.
Anderson, R. Earle, 1637 Chapel St., New Haven, Conn.
Andrews, Benjamin R., Teachers College, Columbia University, New York
Armstrong, Floyd E., 116 Jason St., Arlington, Mass.
Ayars, Christine Merrick, 131 Davis Ave., Brookline, Mass.
Badgely, Arthur, General Electric Co., Schenectady, N. Y.
Barley, A. C., Barley Motor Co., Streator, Ill.
Barnes, Gilbert H., Carnegie Institute of Technology, Pittsburgh, Pa.
Bates, N. E., The N. Escalante Co., 120 Broadway, New York, N. Y.
Bice, Hubert E., 14 E. Patterson Ave., Columbus, Ohio
Bickley, John H., Lehigh University, South Bethlehem, Pa.
Bradley, F. W., Crocker Bldg., San Francisco, Calif.
Bright, Stanley, Cedar Hill Farm, R. F. D. No. 2, Reading, Pa.
Brooks, L. C., National Paper Can Co., 598 Clinton St., Milwaukee, Wis.
Cadwell, H. J., Carthage, N. Y.
Catanzara, Samuel L., 2127 Penn Ave., Pittsburgh, Pa.
Cowan, Stuart D., 44 East 23d St., New York, N. Y.
Dadisman, A. J., Morgantown, W. Va.
Dies, William P., 304 Y. M. C. A., Detroit, Mich.
Dreesen, William H., 203 Commerce Bldg., Urbana, Ill.
Eckelberry, George Wendell, 303 West 8th Ave., Columbus, Ohio
Foth, J. H., Kalamazoo, Mich.
Frank, Glenn, Madison Square Hotel, New York, N. Y.
Franklin, Moses, 28 Davenport St., Detroit, Mich.
Fuller, Charles, 310 W. Washington St., Chicago, Ill.
Gephart, George, Ohio State University, Columbus, Ohio
Gillette, John M., University, N. Dak.
Graham, Wallace, The Ottumwa Mercantile Co., Ottumwa, Iowa
Greene, Everett Kenneth, 1201 Oread Ave., Lawrence, Kans.
Gunzenhauser, Charles E., 1007 N. Duke St., Lancaster, Pa.
Harrison, G. Charter, 31 Nassau St., New York, N. Y.
Hendry, W. A., Portage La Prairie, Manitoba, Canada
Heurtley, Arthur, 50 S. La Salle St., Chicago, Ill.
Honjo, E., No. 87, Okazakicho-Ikenouchi, Kyoto, Japan
Hsu, Chuan-ying, 1104 Euclid St., Champaign, Ill.
Jenkins, C. B., General Asbestos & Rubber Co., Charleston, S. C.
Jerome, Harry, 23 South Hall, University of Wisconsin, Madison, Wis.
Johnson, O. M., Townsend Hall, Ohio State University, Columbus, Ohio
Jordan, G. Weaver, 211 Majestic Bldg., Oklahoma City, Okla.
Lake, Chauncey F., Box 495, Boulder, Colorado
Lee, Mrs. Mary E., Westerville, Ohio
Lupton, Edmund R., 41 Addison Ave., Rutherford, N. J.
Nishi, H., Kyoto Imperial University, Kyoto, Japan

- McJohnston, Harrison, 309 Commerce Bldg., Urbana, Ill.
McLaren, James R., 605 Third St., Brooklyn, N. Y.
Manley, Edward, 6100 University Ave., Chicago, Ill.
Mary Augustine, Sister, Notre Dame College, Baltimore, Md.
Mears, Eliot G., Scarsdale, N. Y.
Miles, George F., 1459 Parsons Ave., Columbus, Ohio
Miller, J. C., The Miller Supply Co., Huntington, W. Va.
Mills, Ogden L., 25 Broad St., New York, N. Y.
Moorehead, R. W., Moorehead Knitting Co., Harrisburg, Pa.
Morgan, Charles, 926 Yale Station, New Haven, Conn.
Morrison, James W., 719 Rush St., Chicago, Ill.
Morse, Lewis Kennedy, 201 Devonshire St., Boston, Mass.
O'Brien, John J., 4118 Washington Blvd., Chicago, Ill.
Oster, John E., 444 Riverside Drive, New York, N. Y.
Parker, Carleton H., 38 Mosswood Road, Berkeley, Calif.
Perkins, Albert T., St. Louis Union Trust Co., St. Louis, Mo.
Pike, Eugene R., 45 Cedar St., Chicago, Ill.
Platt, Robert S., 5520 Blackstone Ave., Chicago, Ill.
Powell, Thomas Reed, Kent Hall, Columbia University, New York, N. Y.
Power, Clifton N., The Sunville Baking Co., Pueblo, Colorado
Powers, Frederick Eugene, Frankfort Ave. and Beach St., Atlantic City,
New Jersey
Priddy, Allan L., Amos Tuck School, Hanover, N. H.
Rich, Edgar, 6 Beacon St., Boston, Mass.
Richards, E. G., 530 West End Ave., New York, N. Y.
Riddle, Jesse H., Graduate College, Princeton, N. J.
Rodgers, B. C., 273 Eliot St., Milton Mass.
Rosenblum, Nathan, 1022 Hoe Ave., New York, N. Y.
Rosenthal, Mrs. Samuel, 1905 Eutaw Place, Baltimore, Md.
Saposs, David J., 118 Historical Library, Madison, Wis.
Schwab, Louis, 20 Vernon Terrace, East Orange, N. J.
Sedam, M. D., 4119 Western Ave., Los Angeles, Calif.
Severance, Frank L., 405 East 8th St., Kansas City, Mo.
Sheppard, Harry E., 806 Sullivant Ave., Columbus, Ohio
Sikes, Earl R., 112 S. Baker, Ithaca, N. Y.
Simons, Seward C., Throop College, Pasadena, Calif.
Smith, M. A., Smith Patterson Co., 52 Summer St., Boston, Mass.
Smith, Pierre J., 91 Wall St., New York, N. Y.
Snively, Charles, Westerville, Ohio
Stein, Ernst, 4850 Kimbark Ave., Chicago, Ill.
Stewart, James A., 15 Dey St., New York, N. Y.
Stiefel, Carl F., 150 Maiden Lane, New York, N. Y.
Stowell, Charles J., 901 W. Springfield Ave., Urbana, Ill.
Straight, Willard, 120 Broadway, New York, N. Y.
Sydenstricker, Edgar, U. S. Public Health Service, Washington, D. C.
Taylor, Edmund, The Goyer Company, Greenville, Miss.
Tetlow, Miss Frances H., 237 Langdon St., Madison, Wis.
Townsend, F. K., Seneca Camera Mfg. Co., Rochester, N. Y.
Trachtenberg, Alexander L., 140 East 19th St., New York, N. Y.
Tugwell, Rexford G., University of Pennsylvania, Philadelphia, Pa.

Urdahl, Thomas K., 23 South Hall, Madison, Wis.
Veith, Ferdinand, Jr., 275 Miller Ave., Brooklyn, N. Y.
Van Thun, William, 55 Cedar St., New York, N. Y.
Vaughan, Floyd L., University of Wisconsin, Madison, Wis.
Von Tungeln, George H., Iowa State College, Ames, Iowa
Webb, George D., 1423 Insurance Exchange, Chicago, Ill.
Wicker, George Ray, Hanover, N. H.
Wilkinson, R. S., State Agricultural and Mechanical College, Orangeburg, South Carolina
Wilson, James E., 528 S. Fifth Ave., Chicago, Ill.
Wolf, F. E., Baldwin City, Kansas
Wolfe, Robert F., Ohio State Journal, Columbus, Ohio
Woodrow, M. E., Corsicana Cotton Mills, Corsicana, Texas
Work, Monroe N., Tuskegee Institute, Tuskegee, Ala.
Young, Edward J., Madison, Wis.
Young, James W., 44 East 23d St., New York, N. Y.
Zook, Joseph I., Care of Montgomery Ward & Co., Chicago, Ill.

At annual meetings held in December, 1916, the following officers were elected for the year 1917:

American Statistical Association: Allyn A. Young, president; S. B. Pearmain, treasurer; Carroll W. Doten, secretary (Massachusetts Institute of Technology, Cambridge, Mass.).

American Political Science Association: Munro Smith, president; Chester Lloyd Jones, secretary-treasurer (University of Wisconsin, Madison, Wis.).

American Association for Labor Legislation: Irving Fisher, president; Adolph Lewisohn, treasurer; John B. Andrews, secretary (131 East 23d St., New York City).

American Sociological Society: George E. Howard, president; Scott E. W. Bedford, secretary-treasurer (University of Chicago, Chicago, Ill.).

A quarterly meeting of the American Statistical Association was held in New York on December 14, 1916, to consider "Some problems and results in current social investigations."

The first meeting of the American Association of University Instructors in Accounting was held in Columbus, Ohio, December 28, 1916. Professor John R. Wildman, of New York University, was elected president.

During the last year there has been established in the Ohio State University a College of Commerce and Journalism. Two years of college work are required for entrance. The groups of work offered, each leading to a degree of bachelor of science, are business administration, journalism, social service, and public service.

The University of Illinois conducted its third Short Course in Business for Retail Merchants at the University, January 30 to February 2, 1917.

The Merchants' Association of New York has established an Industrial Bureau under the directorship of Alfred L. Smith, formerly of the Amos Tuck School, Dartmouth College.

The National Municipal League (North American Bldg., Philadelphia) has selected as the topic for next year's competition for the William H. Baldwin prize, "Tendencies in municipal budget making." The prize is \$100 and the competition is open to undergraduates of any college in the United States. The League has also established a Morton Denison Hull prize of \$250, to be awarded for the best essay on a subject connected with municipal government, and which is open to post-graduate students.

Announcement has been made that prizes offered by Hart Schaffner & Marx for 1916 have been awarded as follows: In Class A, first prize was granted to Duncan A. MacGibbon for a paper entitled "Railway rates and the Canadian Railway Commission"; second prize to J. Noble Stockett, Jr., for a paper entitled "The arbitral determination of railway wages." In Class B, first prize was granted to Victor E. Gutwillig for a paper on "The manufacture and marketing of men's ready-to-wear clothing"; and second prize to Herbert Feis for a paper on "Economics of the minimum wage, with reference to American wage conditions."

The David A. Wells prize of Harvard University for this year has been awarded to C. H. Haring for a thesis entitled "Trade and navigation between Spain and the Indies." For 1915-1916 it was awarded to Harley L. Lutz for an essay on "State control over the assessment of property for taxation, with special reference to the state tax commission."

The Pliny Fisk Statistical Library of Princeton University and the Library of the Bureau of Railway Economics of Washington, D. C., have been preparing a composite catalogue of the railroad mortgages contained in the leading libraries of the United States which have specialized in railroad economics. The material is at present in typewritten form. It will be reproduced and bound in paper if, in view of the usefulness of such a catalogue to students of railway economics and to libraries, there is demand for such an edition. Any one wishing to become a subscriber should address Professor E. W. Kemmerer, Princeton University, Princeton, N. J.

The private library of Professor G. S. Callender has been purchased for the Oberlin College Library by the Class of 1891, of which Professor Callender was a member.

G. E. Stechert & Co., 151 West 25th St., New York City, has issued a typewritten list of second-hand books which they have for sale. These are largely German books dealing with political economy.

The Library of Congress has published *A List of American Doctoral Dissertations Printed in 1915*.

During the past year the Division of Bibliography of the Library of Congress has prepared special typewritten lists on the following subjects: advertising (35 pp.), chain stores (4 pp.), cost of selling (5 pp.), dumping (10 pp.), financial and banking relations between the United States and Latin America (9 pp.), fraudulent practices in the promotion of corporations and the sale of securities (9 pp.), freight classification (3 pp.), industrial insurance, with special reference to accident insurance (6 pp.), populist party (3 pp.), bibliographies on the regulation of public utilities (4 pp.), brief list on tariff (3 pp.), tariff commissions (16 pp.), taxation of inheritances, Jan., 1910-Dec., 1915 (8 pp.), taxation of intangible property, with special reference to mortgages (5 pp.), exemption from taxation of the property of churches and educational institutions (4 pp.), trade organization in Germany (7 pp.), trade unions among government employees (6 pp.), valuation of real property for taxation (7 pp.), and welfare work for laborers (3 pp.).

Professor L. B. Schmidt, in charge of history at the Iowa State College of Agriculture and Mechanic Arts, has begun the preparation of the "Economic History of Agriculture in Iowa," which will be published by the State Historical Society of Iowa.

The first volume of the year book published by the Permanent Office of the International Statistical Institute (the Hague) has been received. It is entitled "Etat de la Population (Europe)" and covers 166 pages. This is soon to be followed by a volume on the movement of population in Europe and one on the movement of the population of countries outside of Europe.

D. Appleton and Company announce the early publication of *An Introduction to Social Psychology*, by Professor Charles A. Ellwood of the University of Missouri; and *Introduction to Rural Sociology*, by Professor Paul L. Vogt, of Ohio State University.

The City Club of Chicago has recently published *Land Development*, edited by A. B. Yeomans.

The Macmillan Company will shortly publish a book on *American Labor History*, by John R. Commons and others, which follows these subdivisions: Colonial and federal beginnings to 1827; Citizenship, 1827-1833; Trade unionism, 1833-1839; Humanitarianism, 1858-1877; Nationalization, 1858-1877; Upheaval and reorganization, 1876-1896.

Dr. Alexander E. Cance and Mr. Ralph M. Rntledge, of the department of agricultural economics at the Massachusetts Agricultural College, are the joint authors of a bulletin on *National Farm Loan Associations*. This bulletin, published by the Extension Service of the college, explains the purpose of the farm loan act and the methods of organization and conduct of the farm loan association. Amortization tables and suggested forms for articles of association and by-laws for the associations are presented as appendices.

The spring announcement of new Macmillan books includes: *Elementary Principles of Economics*, by Richard T. Ely and George Ray Wicker; *Elementary Social Science*, by Frank C. Leavitt; *History of Commerce and Industry*, by Cheesman A. Herrick; *Economic Development of Modern Europe*, by Frederic Austin Ogg; *The Danish West Indies*, by Waldemar Westergaard; *Alaska: The Great Country*, by Ella Higginson; *American World Policies*, by Walter E. Weyl; *Everyday Bookkeeping*, by Artemus M. Bogle; *Some Legal Phases of Corporate Financing Reorganization and Regulation*, by Francis Lynde Stetson, James Byrne, and others; *The Minimum Cost of Living: A Study of Families of Limited Income in New York City*, by Winifred Stuart Gibbs; and *The Extent and Scope of Jewish Philanthropy*, by Boris D. Bogen.

The current volume of the *Review of Historical Publications relating to Canada*, volume 20 of the University of Toronto series, contains notices of some thirty books and articles in the section given to geography, economics, and statistics.

The *Political Science Quarterly* has published an *Index* to the thirty volumes appearing between 1886 and 1916.

The National Conference of Catholic Charities has begun the monthly publication of *The Catholic Charities Review*. The editor is Rev. John A. Ryan (Catholic University of America, Washington, D. C.); the subscription price, \$1 yearly.

In January, 1917, appeared the first number of a new monthly

magazine devoted to railway and industrial traffic efficiency. *Commerce* is combined with the "Railway World" and is published by the Commerce Publishing Company, Chicago, at a subscription price of \$3.

Appointments and Resignations

Mr. George B. L. Arner is statistician for the International Health Board of the Rockefeller Foundation in New York City.

Professor E. L. Bogart, of the University of Illinois, and Professor Meade, of the University of Pennsylvania, will lecture in the Columbia Summer School this year.

Dr. Moritz J. Bonn, of the University of Munich, in February gave a short course of lectures at the Ohio State University on the commercial and industrial expansion of Germany during the last quarter-century.

Professor Frank T. Carlton, of Albion College, is delivering a short series of lectures on sociological problems before the students in the various training schools connected with the Battle Creek Sanitarium.

Professor Irving Fisher is to give the Hitchcock lectures at the University of California, next October, on the subject of price levels.

Mr. John A. Fitch has been appointed a member of the permanent staff of the New York School of Philanthropy in the department of industry and will give the courses on industrial conditions and industrial research.

Professor John H. Gray, of the University of Minnesota, is on sabbatical leave from February 1, 1917, to September 1, 1918, to take up work under the Division of Valuation of the Interstate Commerce Commission.

Professor M. B. Hammond, of the Ohio State University, in January gave at Harvard University three lectures on recent developments in the labor arbitration controversy in Australia and New Zealand.

Professor Edward D. Jones, of the University of Michigan, in February lectured under the direction of the Wall Street Division of the New York University School of Commerce, Accounts and Finance on "The principles of business administration."

Dr. H. L. King has been appointed instructor in history and economics at Oberlin College.

Mr. Milo R. Maltbie has resigned his position as adviser of the Division of Valuation of the Interstate Commerce Commission on account of his service as city chamberlain of New York City.

Mr. E. C. Porter is making an investigation of economic conditions in Russia in behalf of the American-Russian Chamber of Commerce, of which he is executive secretary.

Dr. A. M. Sakolski, the secretary of the Valuation Committee of the Delaware and Hudson Company, has full charge during this year of the educational courses of the Albany Chapter of the American Institute of Banking.

Dr. Hugo P. J. Selinger has been appointed to the Edwin M. Stanton professorship of economics and sociology in Kenyon College.

Miss Mary Van Kleeck has resigned from the staff of the New York School of Philanthropy in order to give her entire time to the Department of Industry in the Russell Sage Foundation, of which she is director.

Paul Leroy Beaulieu died December 10, 1916, at the age of seventy-three. For forty-three years he had edited *L'Economiste Français*, of which he was the founder; and for a period of twenty-five years had also served on the staff of *La Revue des Deux Mondes*. Among the best known of his books are: *Traité d'Economie Politique*; *Précis d'Economie Politique*; and *Traité de la Science des Finances*.

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WHAT THE FEDERAL RESERVE SYSTEM HAS DONE

Two and a half years of experience in the operation of federal reserve banks is not a period of sufficient length to enable the careful student of banking institutions to form a final judgment concerning them. The banks, although technically in existence for about thirty months, have been fully organized and in operation for a much shorter period. They may perhaps be said to have had a real operating life of from eighteen months to two years. But even that length of time has not afforded the test that would have been furnished at almost any other period in American financial history. The unexpected and drastic changes in financial and commercial relationships due to the European war have altered underlying conditions, have produced developments in foreign trade and in banking that could not have been predicted, and, coupled with the unusual and extreme financial expedients adopted by foreign governments, have subjected the American market to highly artificial conditions. For all these reasons, a judgment of the success of the federal reserve system and a prediction based thereon, if furnished at this time, must be accepted only subject to very grave qualifications. Some of these will appear later in the present discussion; others no doubt will suggest themselves to the reader without being pointed out. The conclusion arrived at must in any event be regarded as tentative and as being stated entirely in terms of existing conditions—that is, as indicating a comparative judgment regarding the value of the federal reserve banking system in contrast to the conditions which would have existed had it not been organized.

I

Certain obvious elements in the federal reserve system may first be enumerated and disposed of, more as a matter of record than as contributing much to the discussion. First of all, the federal reserve system has proved its practicability and has shown that it can be a successful “going concern.” This statement, now so widely if not universally conceded, was, as will be remembered, sharply combated at the time of the passage of the Federal Re-

serve act and for a good while afterward. The doubt it implies probably lingered in the minds of many who were hopeful of the success of the system, and may even have troubled some of those who firmly believed in its possibilities. The cruder fears then expressed—that the reserve banks would be controlled by political or unbusinesslike considerations both as to personnel and as to their operations—were promptly proved without foundation, and even those who have been most anxious to find traces of corruption, gross nepotism or genuine inefficiency in the banks, have been unsuccessful. The present writer has on a former occasion pointed out that at the beginning some of the banks were probably over-staffed as a result of the inability to forecast the exact scope of the business to be undertaken. The terms of the law itself make unavoidable a heavy overhead expense, and it may be conceded to those who seek to find a basis for criticisms that probably all of the banks if commercially operated could be conducted on a somewhat lower level of expense than they now are. This does not mean that there has been extravagance or carelessness in management but merely that the conditions under which the banks have been organized, the terms of the law creating them, the necessary safeguards involved in their handling of funds, and other considerations which necessitate the maintenance of elaborate records and complete control of every operation, have made them expensive institutions. That they have been too expensive for the service they have rendered, few contend; and the fact that during the year 1916 the banks, besides covering all expenses, earned 5 per cent net upon their capital, while maintaining themselves in exceptionally strong condition, should effectually terminate the discussion as to whether they can be made to “pay” or not. The management of the Federal Reserve Board at Washington has been successful in moulding the system into a uniform shape, and relationships between the board and the banks have produced so little friction that even a rather severe critic thoroughly familiar with the inner workings of the administrative organization of the system would probably concede success in this branch of its activities. The expenses of the board, including all salaries, have aggregated less than \$220,000 a year, and mark it as one of the least costly government enterprises of the sort now in existence.

Again, it is to be noted that the currency supplied by the system has been readily available, satisfactory to the public and to

the banks, and abundant in amount, so that the "emergency currency" aspect of the so-called "banking reform problem" appears to have been fully dealt with. This brief sketch of the more obvious facts regarding the working of the system may be summarized in the statement that "success" in the superficial sense of the term has unquestionably attended the enterprise, and the statements made are so little open to controversy that they may almost be regarded as axiomatic.

II

As there was never any reasonable room for doubt regarding the success of the federal reserve system in the sense already described, granting honesty and fair ability in putting it into operation, so there need be no assumption of exceptional credit and no claim to more than ordinary achievement growing out of what has been done in this regard. It is rather with the subtler workings of the system and with its effects upon banking in the scientific sense of the term that the student is concerned. He will look for an answer to the questions whether the system has in reality improved and strengthened the banking condition of the United States in the way that was expected and hoped by careful analysts of banking problems, and he will inquire whether those matters in which the federal reserve system constituted a new and original departure from the ordinary principles laid down in what was previously included under the head of "banking reform" have been justified. To these questions we may now address our attention.

Perhaps the most fundamental problem affecting the whole system is that which grows out of the so-called "regional" type of organization. The Federal Reserve act while in its early stages was bitterly assailed not only by those who have continued to complain of its regional character but also by many who are now members of the system created by it. It was then asserted that the central or coöperative banking principle could not be successfully worked out upon a district plan; that no national discount market could be brought into existence under such a plan; that the policies of the several federal reserve banks could not be harmonized or adapted to one another sufficiently to bring about the necessary community of action, and that the existence of the several districts would render the various banks so weak, dependent and inefficient as to deprive them of real strength. These opin-

ions were never accepted by the less partisan of those who shared in banking discussion prior to the year 1914, and would not be conceded now, even without experience in operation. Conclusions drawn from the two and a half years of experience with the system must, as already suggested, be modified by the fact that conditions have been very unusual. Nevertheless, we may put forward with assurance certain definite ideas upon each of these points. The reserve banks have beyond any question been operated as a unit. Their discount rates have been substantially similar, bearing in mind differences in local conditions, and there has been little or no difficulty on their part in meeting the local conditions that called for remedial action. The Southern reserve banks, while not equal in capitalization and resources to the others, have been able to render marked assistance to the banks of their own communities, and through them to the borrower, while their influence has been in the direction of moderating and harmonizing interest and discount rates to such a degree as to bring decided and generous recognition of their work not only from technical men but from the public at large. If a section of this public is at times inclined to praise the reserve banks because of a belief that to the work of these institutions may be attributed increases in the prices of cotton or other staples, it yet remains true that much of the recognition accorded to their efforts has been more discriminating. The Southern agricultural communities have found that the stringency of the "crop moving period" has been greatly diminished, and that an appreciable part of this benefit is attributable to the working of the reserve system. While it has never been necessary thus far for one reserve bank to draw upon another for aid through rediscounts, the machinery for extending such aid is always available, and there is probably no informed person who doubts that had such aid been required it could and would have been promptly rendered. It is, therefore, fair to conclude that the country has derived from the federal reserve banks organized upon the regional or district plan all of those benefits in the way of accommodation, adjustment of rates, and equalization of banking capital that they could have had from a central bank with branches. The statement that a central bank with branches would have done the same work very much more cheaply is scarcely borne out by the limited experience of the reserve system thus far in the matter of branches, and is still less supported by the evident logic of the facts in the case. Ex-

perience has daily demonstrated that the various communities desire local institutions and that a central bank would have had to establish branches nearly as costly in their operation as the individual federal reserve banks is a conclusion that can hardly be escaped. Some saving in overhead expenses could probably have been made by such an institution and a slight saving in the cost of note issue could probably also have been secured, but beyond this it is difficult to see any advantage in the one plan over the other as relating to economy of administration.

On the other hand there seems to be no reason to doubt that the regional or district plan has operated as effectively in the direction of a discount market as a central bank would have done. It was a commonplace among those who opposed the new system to say that the discount market could not be secured save through a bank organized upon highly centralized principles. Just how far this "discount market" may be said to have been brought into existence we shall inquire more fully at a later point. The question here at issue is whether or not the district type of organization has been in any way different in its effect upon the discount market from that of the central bank. The answer would seem to be decidedly in the negative. Several considerations may be cited in support of this view. In the first place, there has been close coöperation between the federal reserve banks in most matters. In other ways, moreover, close coördination of work has been obtained. Reference has already been made to the adjustment of discount rates to one another upon a close working basis, but this is only one of several examples of coöperation. If it be said that this coöperation and coördination is merely another way of approximating to a central bank plan of organization and that it differs from the latter only in being less efficient and more clumsy, the reply must nevertheless be ruled out of account. The question is not whether the federal reserve system can or could successfully substitute something new for the methods of central banking but whether it can make use of those methods. If it has done so, those who were disposed to contend that it could not succeed for lack of them must own themselves in the wrong.

The issue, however, is far more important than that of proving whether this or that contending group was or was not right; it is a question whether the methods of the federal reserve system looking to the establishment of a definite discount market have been efficient and satisfactory, and to this the reply must

be on the whole in the affirmative. Interest rates have undoubtedly been stabilized and rendered more uniform than in the past, while the banks have been able to act as a unit in their purchases of paper and investments. Indeed, some might consider that more criticism should be visited upon the closeness of this coöperation, than upon the alleged clumsiness of the expedients employed. There is general agreement that the district plan of organization has resulted in bringing the reserve banks of the several districts considerably closer to the communities in which they are located than could have been true had these banks been mere branches of a central organization. This is not a partisan or one-sided assertion, but is a generalization from authoritative expressions made by many persons including not a few of those who formerly entertained the opposite view. While there has been criticism of the method of electing the directorates of the several banks, and while it has been and is frequently stated that these directorates are not satisfactorily representative of the banking and business communities in which they are located, owing to the preponderating power given to the smaller banks through the equality of voting strength ("one bank, one vote") provided in the act, combined with the singular circumstance that many country banks do not care to exercise their franchise, it yet remains an admitted fact that the banks are regarded by their several communities as being in a very direct sense their own institutions, controlled by them, responsive to their needs, and far more truly representative of local requirements, as already stated, than the branches of a central bank could have been.

III

It was apparent from the initiation of the federal reserve system that its essential success would depend very largely upon its being able to reform the commercial paper of the country. It is not now necessary to consider the lines along which this reform was called for, since recent banking discussion has made the whole subject familiar to all students. As is well known, the banking paper of the United States has developed in a predominating degree upon the "single-name" basis, as opposed to the "acceptance" or "two-name" basis adopted in foreign countries. While there have been voices, some of them influential, that protested against the attempt to substitute two-name paper for single-name, the general drift of discussion in recent years has been toward two-name paper,

on the ground that it represented a more scientific, logical, and safe method of doing business. Perhaps the very latest development in opinion since the organization of the federal reserve system has been that whereas the single-name plan has merits of such distinct nature as to insure its continued existence, the two-name or acceptance plan is needed as an auxiliary so that in the future the paper of the United States may be regarded as prominently containing elements of both classes. This eclectic view seems likely to be the sound one, although it safely avoids committing itself on the question how far the acceptance paper is to displace the single-name variety. What is clear is that one test of the federal reserve system must inevitably be the extent to which it has facilitated or assisted the growth of this acceptance paper. Has it done so in any adequate measure and can it in the future increase the degree of its success in that regard? The Federal Reserve act as originally passed gave the Federal Reserve Board authority to define commercial paper eligible for rediscount at federal reserve banks, and the board in its initial stages desired to discriminate in favor of the two-name paper, though it never went so far as to commit itself definitely in that way. Single-name paper has always formed the bulk of that discounted by the federal reserve banks, and this has been apparently the result of necessity. The Federal Reserve act, however, clearly intended to stimulate the "bill of exchange" whether that of the commercial enterprise or of the banker, and the board has, therefore, very properly endeavored by favoring rates and by special regulations to encourage the development both of the commercial bill of exchange (designated by it as the "trade acceptance") and of the bankers' accepted "bill of exchange."

Despite these efforts, the quantity of trade acceptances or commercial bills offering in the New York market has been lately described by a practical banking authority very friendly to the trade acceptance as "negligible." Although the amount of this paper rediscounted at federal reserve banks has been extraordinarily small, investigations carried on for the purpose of ascertaining how far the new type of paper was being used have shown that it was gaining ground, and in the autumn of 1916 a committee of federal reserve agents charged with the duty of investigating the subject, compiled from easily available sources a list of seventy more or less influential firms and corporations which had definitely adopted it. This list, it is understood, has been

considerably extended since that time. In some parts of the country no progress whatever seems to have been made, due to the fact that local concerns were not dependent upon the banks and had no trouble in conducting their business relations upon the open account system. In others, however, very decided progress is clearly being attained, and the volume of trade acceptances presented to the banks is evidently no measure of the volume in existence. For evident reasons, the trade acceptance is a desirable means of closing an account, even if the concern which sells the goods is not under the necessity of discounting its paper at a bank. On the commercial side, then, it must be said that the federal reserve system has only begun the development of the particular kind of paper which is necessary to the satisfactory upbuilding of the enterprise. More attention has been given to the bankers' acceptance than to the trade acceptance, and apparently more success has been attained in connection with it. The original federal reserve act permitted the use of bankers' acceptances only in financing the exportation and importation of goods, a limitation at first understood to apply to foreign trade between the United States and other countries, but extended by the Federal Reserve Board to cover international trade between any countries. Later (on September 7, 1916) permission was granted for the acceptance by banks of bills growing out of domestic trade provided that the latter were documented in every case. Today, therefore, the bankers' acceptance may be drawn either as a foreign or as a domestic bill. No satisfactory data are as yet available concerning the development of the domestic acceptance, and, whatever the volume in existence may be, it is probably small. The foreign bankers' acceptance has had about two years for development, and we may roughly estimate that at the present time the acceptances of all American banks, whether members of the federal reserve system or not, are about \$250,000,000—\$300,000,000. Every member bank has the right to accept such paper up to 50 per cent of its capital stock, and the Federal Reserve Board has granted to forty-four banks the power to accept up to 100 per cent. The following brief table shows the distribution of these acceptances in an approximately accurate way:

ACCEPTANCE LIABILITIES OF BANKS AND TRUST COMPANIES.

In Greater New York					
National banks	March 5, 1917	\$50,120,900	Nov. 17, 1916	\$61,359,700	
Trust companies	Feb. 28, "	102,240,100	Nov. 29, "	89,005,400	
State banks	" " "	6,546,200	" " "	3,442,300	
In Philadelphia					
National banks	March 5, 1917	8,848,700	Nov. 17, 1916	8,640,000	
In Maryland					
State banks and trust companies	Dec. 27, 1916	3,973,100	Nov. 17, 1916	3,308,100	
All other national banks	" " "	38,917,000	" " "	34,279,000	
Total reported		\$210,646,000		\$200,034,500	
All other (estimated)		50,000,000			
Total		\$260,646,000			

On the surface, this progress in the use of the bankers' acceptance may be regarded as satisfactory. It may be true, as some critics state, that the development is "abnormal," and that had it not been for the sudden advent of the United States in the international market as a "creditor country," no such use of the bankers' acceptance could possibly have been attained. This question is one of those "pleas of confession and avoidance," to which no attention need be paid. The fact is that the development has occurred and that it has been rendered possible by the existence of the federal reserve system. How far, however, has it been real? Very early in its history the Federal Reserve Board was obliged to meet the inquiry whether an acceptance must be based upon a commercial transaction in the narrow and restricted sense of the term—that is to say, whether the acceptance must represent an actual sale of goods corresponding to that particular drawing and to be settled for at maturity. There were evidently two questions involved in this matter: one, whether each and every acceptance as such must represent a transaction, an actual shipment, or whether it might represent merely a part of a general operation; the other, whether the paper so given must be positively regarded as an obligation demanding settlement at maturity or whether it might be "renewed." It is evident that the question really at stake here was whether the bankers' acceptance must or must not be regarded as a genuine commercial bill. The Federal Reserve Board ruled that there was nothing to prevent a bank from entering into a contract establishing a line of credit in behalf of given concerns, and that when this line had been established, acceptances (provided they did not overrun the total credit thus established) could be renewed or replaced by new issues for a designated period. The acceptance thus really tended to be-

come a finance bill, and a considerable volume of renewal acceptances was promptly placed upon the market by bankers who were engaged in financing the operations of concerns desirous of supplying goods to foreign governments. It is not possible to state exactly the amount of these renewal acceptances, but the volume placed on the market up to January 1, 1917, was probably in the neighborhood of \$125,000,000. The amount held by the federal reserve banks at its maximum was about \$30,000,000, a sum since reduced to less than one half its former amount.

These renewal acceptances cannot be regarded as a normal or perhaps as a wholesome element in the financial market. The idea of renewal is itself repugnant to the conception of the commercial bill, and when we recognize that perhaps one half of the total acceptances available in the American market today are of this non-commercial kind, our progress in the development of the bankers' acceptance plainly appears to have been much less than had been supposed. That there has been real progress, that the new method has struck its roots, that it will in future not merely hold its own, but develop, there is every reason to believe, and this must be regarded as one of the hopeful and useful results of the federal reserve system up to date. The discount market in so far as based upon standardized commercial paper, authenticated by the acceptance of houses so well known as to render paper marketable, exists today in the United States, but exists only as a nucleus surrounded by a somewhat nebulous and uncertain body of possibilities. There remains, therefore, the task of developing and confirming the real practice of acceptance by American banking houses upon a regular business basis, not the result of war or of exceptional export conditions, but worked out in consequence of legitimate commercial demand, coupled with the application of active banking enterprise. Exactly how far and how soon this will be possible, it must be admitted still remains to be ascertained. The failure of American banking houses to enter the foreign field with any degree of activity in so far as the establishment of branches or regular agencies abroad is concerned, is not an encouraging symptom, although, of course, the development of the acceptance market may proceed upon more or less satisfactory lines independent of this active participation in foreign trade.

IV

One of the fundamental ideas that were embodied in the Federal Reserve act as originally drawn was that of providing a check collection system that would be national in its scope. The considerations which impelled the framers of the Federal Reserve act to incorporate this provision were both theoretical and practical. We need not here discuss, however, the theoretical aspect of credit media in their relation to the currency, but may for present purposes confine attention wholly to actual results as exemplified in practice, through the application of the Federal Reserve act. The bad practice whereby checks were maintained outstanding for large amounts and for long periods of time in order to enhance the apparent holdings of various banks, and the coördinate practice whereby holders of such checks were made to pay exorbitant and varying sums for the conversion of their claims into actual money had been recognized by the framers of the act as unwarranted handicaps to industry and as blemishes upon an otherwise promising system of business settlement. They were, moreover, regarded as germs of unsoundness, likely to produce harmful growths when stringency or panic brought bad conditions leading to a suspension of specie payments, which usually rendered the great "float" of checks and drafts uncollectible in cash. Upon the practical side it was recognized that under the old system of reserves, reserve balances in cities had been made to carry the load of collections, that is to say, had been made to serve a dual purpose—that of a reserve balance and that of a collection basis.

It was noted that this reserve consisted in no small degree of uncollected items which had been deposited with the banks and had as a matter of courtesy on the part of the Comptroller of the Currency been allowed to count as reserves. It was believed that in practice the member bank must be furnished with the same service by the reserve bank that it had in the past received from other member banks acting as reserve agents, and that this service on the part of reserve banks would tend very strongly (if properly performed) to reduce the amount of the outstanding "float" and to place the collection system upon a sound and effective footing.

We shall not find it necessary at this point to rehearse the history of the long struggle that has attended the effort to make the collection requirements of the act effective. Enough has been said when it is pointed out that from the beginning the application

of the collection system was met with determined opposition from a great variety of sources, and that the disposition on the part of the Federal Reserve Board to leave the question to the various banks to be worked out as a matter of practical experience and adjustment was not a success. As the time for the final transfer of reserves has drawn near (November 16, 1917), it has, however, been appreciated more and more strongly by wise bankers that an effective clearing and collection system ought to be introduced and made actually operative before the time of eventual transfer when the reserve balances with city banks would no longer count as reserves should arrive. Hence, the action of the Federal Reserve Board in adopting in the early summer of 1916 a compulsory system of clearings and collection. Inasmuch as the items were drawn, in the nature of things, not only upon other members but also upon non-members it was early perceived that the success of the plan would depend upon obtaining the consent of non-members to its application. That enough non-members have accepted the plan to make the total number of assenting banks about 15,000 (as against some 7,625 regular members of the system) shows that the plan has thus far met with very distinct success. In effect, it amounts to nothing more than the undertaking of check collection at par, with deferred book credit, a moderate charge for handling the several items being made to the banks that deposit them.

The operation of this plan of clearing and collection has materially reduced exchange charges in many parts of the United States. Various large business houses testify that they have made savings of 50 per cent of their annual exchange charges. This saving has been effected without the sacrifice of legitimate business by any bank. There is no truth in the constant statements that banks are compelled under the plan to make their checks good at a great distance from home. The ruling of the board has merely been that checks drawn upon a member bank must be paid for by acceptable exchange remitted by the member bank to the federal reserve bank, but that in the absence of such exchange the *reserve bank* will pay the cost of transmitting currency. At one time recalcitrant banks were informed that non-adherence to the system would mean that checks would be directly presented to them and collected in currency at their counters through the Post Office Department, but this has not been found necessary thus far. About all that can be said, then, is that the collection system of the

Federal Reserve Board by enlisting, in some cases, the services of the express companies, as check collecting agencies has up to date prevented banks from enforcing a discount upon their own checks and has compelled them to meet these obligations over their counter at par or to adopt a policy which was equivalent thereto.

This is a long stride toward the establishment of better, fairer, and more businesslike conditions of check settlement in the United States than have ever in the past existed. It is the first time that any scientific, unifying effort has been made in the direction referred to. One result of the work done is to bring about a greater approach toward uniformity in clearing house rules and in many other ways the indirect consequences of the attempt have been as beneficial as its direct results. Very distinct credit should be given to the federal reserve system as a whole for what it has accomplished in this particular, even while the admission is made that it has not yet gone the full length that some had expected, or attained as yet the results that may reasonably be expected at a later date.

In this connection it is appropriate to note that the progress in transferring reserves from city banks to federal reserve banks has been steady and has occurred without the slightest shock to business or banking operations. One reason for the extension of the time required for this transfer over what was practically a three-year period was found in the constant predictions that the transfer would cause severe stringency. Whether as a result of the large importation of gold into the United States or for other reasons, such stringency has at all events not materialized, and the final transfers, if ordered, could be made without the necessity of shifting any actual cash from the large city banks to the federal reserve banks. The development of a satisfactory check collection system has undoubtedly gone far toward reconciling the wiser bankers of the country to the transfer of reserves, while the admission is now very general that the new system without an adequate reserve requirement could not possibly have succeeded.

V

In one phase the operation of the federal reserve system thus far must be considered decidedly incomplete. Most of the bills which preceded the Federal Reserve act had made a more or less elaborate provision for foreign banking, authorizing the establish-

ment of branches abroad and in other ways contemplating the upbuilding of American business elsewhere. This need was an obvious necessity, for American banking has nowhere been so inadequate as in its cultivation of the foreign field. As will be remembered, the Federal Reserve act, following the lines laid down by the discussion of the past fifteen years, had likewise made provision for foreign branches of American banks, subsequently supplemented by an amended provision which authorized the creation of foreign banks whose stocks should be held by groups of member banks, while it also made provision for the acceptance system already discussed. We have seen that the acceptance system has been artificially implanted in the United States and has attained a certain growth, but that its future must eventually be determined in no small degree by the action of American bankers in entering the foreign field. It must be admitted with regret that thus far very little progress in this direction has been made. American bankers have taken the foreign business that was automatically transferred to them or which came to them by reason of the lower rates of our domestic market, but they have shown comparatively little active interest in foreign banking as such.

We must conclude, therefore, that the banks of the country have not gone actively into the task of preparing themselves for the struggle to retain our foreign trade after the change of conditions which all admit must come when European conditions materially alter, and when competition is restored to something like its former intensity. The federal reserve system has made a beginning by undertaking preliminary arrangements looking to the designation of foreign agencies intended to assist in fulfilling the purposes of the system in so far as these relate to foreign operations. We need not, however, insist upon the fact that the federal reserve system has a purpose which is essentially different from that of ordinary commercial banks, and that whatever it may do in promoting our relations with foreign countries and in aiding in the general plan to promote the welfare of the American discount market, it cannot perform the task which only strong commercially organized institutions can fulfill—that of exploiting and developing the foreign market in the interest of our own business community.

It is to be feared that some of our bankers look at this question as if it were a question of immediate profit solely. They are inclined to inquire into the possible profits to be gained by the estab-

lishment of branches and connections abroad, as if it affected only them and the welfare of their institutions. The question is, however, a good deal broader than this, since it involves the whole matter of retaining our trade and developing it in markets other than our own domestic fields. The business man will not be able under existing conditions in trade and industry, to carry on the campaign alone. He must have that powerful assistance which only the banker can afford, and this cannot be rendered without special organization and coöperation for foreign trade. There are two methods by which such effective coöperation can be accomplished: one, the actual establishment of bank branches abroad; the other, the establishment of connections with some institution which will faithfully and earnestly represent the interests of our own bankers and business men in those foreign countries.

We have long known that England's powerful hold upon the trade of South America and the Far East was not due to any innate fondness on the part of the people of those regions for Great Britain or her citizens, but was due to the fact that British banking institutions stood ready to facilitate the movement of goods to those countries, while they also stood ready within reasonable limits to assist in the development of the resources of those countries, and in the exportation of their products to Great Britain. The progress which has been made in recent years by German bankers and business men in competing with Great Britain and her representatives, has been due to Germany's recognition of the essential basis for British trade, and her adoption of similar modes of getting and controlling business. The real question in the whole matter is: Do we want to continue our present control of foreign trade, or are we content to return to the foreign trade situation which existed before the European war? If we do in fact believe that benefit comes to the country from the maintenance of a strong and well-diversified foreign trade, it will be necessary for us as a nation to adopt those measures and methods which experience has shown to be requisite.

In order to deal with foreign countries successfully we must not only sell but buy. We must do more than this. We must hold out the help necessary to enable our own business men to place their goods on foreign markets with success and at reasonable cost, and we must enable shippers in this country to export without unreasonable sacrifice. Moreover, we must, if we wish to

create a permanent and growing foreign trade, aid producers and shippers abroad by every legitimate means in our power, to increase their output, and to market it under favorable conditions. The idea that this cannot be done, or that some special difficulties stand in the way, or that the problem is being prematurely presented, or that for some reason we can escape immediate action upon it, has been dispelled by the events of the past two years. It must be evident to all that the present moment is one which calls for the exercise of constructive business ability and the display of enterprise and initiative by our people along every line that experience shows to be required in facilitating the growth of business.

The fact that there has been so little genuine pioneer work in the direction of foreign trade is not a reflection upon the federal reserve system, but is merely an indication that American bankers and business men have not as yet aroused themselves to the real facts regarding our foreign trade situation. Yet it is evident that they must so arouse themselves and that their interest must become active and vigorous if the system itself is really to succeed. One of its great functions, as we have already seen, is that of establishing a discount market. Yet no such market can be successful unless it is given an international scope. The action of the Federal Reserve Board in establishing certain agencies or connections with foreign banking institutions is helpful as far as it goes, but cannot, of course, attain its full object unless genuine participation in foreign finance is undertaken by American institutions.

VI

Brief reference has been made at various points in the foregoing discussion to the earnings of federal reserve banks. To the close of the year 1915 these earnings were about 3 per cent on capital above expenses, while for the year 1916 they were about 5 per cent. The returns thus obtained have been secured through the employment of only a small portion of the resources of the banks, and experience has made it evident that there will ordinarily be no trouble whatever in paying expenses and an excess above the 6 per cent which the banks may under the law retain for themselves. The question of earnings, however, is of very much broader significance than has ordinarily been conceded. As the federal reserve system grows older it becomes more and more evident that the

great question for it to settle is whether it is an emergency system or whether it is an integral part of the financial mechanism of the country. The great central banks of Europe are the leaders of the financial markets of their respective countries and the commanding factors therein. The legislative proposals which preceded the Federal Reserve act were framed upon an entirely different theory. They conformed to the remedial measures that had been suggested for a quarter of a century previous, and like them, were based upon the view that legislation should be of an emergency character. The bank desired emergency relief from the bad results of inflation, panic, or disaster. The Federal Reserve act was not confined, however, to the satisfying of such a demand. It created a permanent and costly organization; it provided regular and sustained functions which must be continuously performed in order to render the system efficient; it looked to regular rediscount transactions, not merely as a means of paying its expenses and dividends but as an indispensable medium through which to affect rates of interest and lending conditions. For all these reasons it was expected to play an active and important part in the market. This, however, it has not as yet succeeded in doing. Rediscount operations with it have been small, largely because of the great ease of money the country over. In order to sustain itself and to exert the influence it was expected to have, the system has, therefore, been obliged to operate under its open market powers. Of a total investment of about \$740,000,000 for the year ending December 31, 1916, 52 per cent consisted of bankers' acceptances and 12 per cent of warrants. Only 28 per cent consisted of rediscounted paper, while, of the bankers' acceptances thus held, a considerable part were the so-called renewal acceptances. It must be concluded from this that the field of activity in which the reserve system has thus far exerted itself has not been a broad one, and the question may fairly be asked how much it will be broadened in the future. Although specific provision was made in the Reserve act for direct dealings between federal reserve banks and individuals in case of necessity, practically none such have ever been undertaken, and some of the reserve banks even go so far as to decline to deal with an individual, even though he bring to them paper with the acceptance or endorsement or both of a member bank. They prefer to obtain their open market paper through brokers, and they abstain from any direct relationship with the business community. This policy is

in pursuance of the feeling that a plan of rigid separation between the reserve bank and the public will be more acceptable to member banks than one of close relationship, and the question is properly and pointedly asked whether the reserve system can succeed upon these lines. The answer undoubtedly depends upon the extent to which the member banks are willing to foster it and the volume of business which they permit to come to it. Should the system persevere in the view that for reasons of policy it is not wise to become active in the open market as a competitor of any bank, its field of operations will be confined to that which is allotted to it by the banks. Its popularity will be developed, moreover, only among the banks, since the business man will find himself entirely divorced from it save in so far as he may realize the effect of its indirect working. It is, therefore, fair to say that up to date the federal reserve system has not incorporated itself into the business life of the community and that it is still to be seen how far it will do so. Whether it is desirable that the system should be thus closely allied to the commercial world or not is a matter about which opinions evidently differ, but there is unquestionably a distinct body of opinion holding that a reasonable and direct relationship to the business community would strengthen not only the federal reserve system in the narrow sense of the term, but also its individual members. The settlement of this difference of opinion is perhaps the greatest problem by which the system today is confronted.

VII

It may be worth while to draw together, in a brief summary, the conclusions of the foregoing discussion. The federal reserve system has accomplished the following results:

1. It has successfully organized and set in operation a plan of coöperative banking in each of the twelve districts comprising the continental United States.

2. It has successfully established and organized at Washington a central supervisory agency entitled the Federal Reserve Board.

3. The banks and the board have been, on the whole, efficiently and satisfactorily operated.

4. Under this organization interest rates have been harmonized and unified to some extent, currency demands have been readily and effectively met, crop-moving difficulties have been made to disappear, and generally harmonious action conveying all of the

benefits of centralized banking, and free of many of the demerits of that plan, has been the order of the day. Seasonal shipments of currency have been rendered unnecessary.

5. The federal reserve system has made decided and satisfactory progress toward the unification of the underlying banking resources of the country, and the accumulation of its gold reserves under uniform control.

The federal reserve system has undertaken several important pieces of work which are still incomplete:

1. It has begun the standardization and unification of the commercial paper of the country. Some progress has been made in this direction, but what has been done has been primarily educational, and thus far only secondarily practical.

2. An effort has been made to introduce new kinds of paper, notably the bankers' acceptance. With the aid of unusual financial conditions marked progress has been obtained, but this progress has been to some extent vitiated through the adoption of irregular or unusual expedients.

3. The federal reserve system has undertaken the establishment of a uniform and universal system for the collection of checks. It has succeeded in establishing such a system, and has been successful in eliminating some of the dangers arising from the artificially stimulated "float" which was carried by many banks in former times. It has rendered the task of check collection cheaper than formerly. A part of the benefits, but not all, have been transferred to the public. It will be necessary to have more coöperation from banks and clearing houses before the plan is wholly successful.

4. The federal reserve system has endeavored to make a beginning at standardizing methods of business accounting and securing the rendering of uniform statements, which so far has been only partially successful.

There still remain to be accomplished (in addition to the continuation of development along the lines set forth above) certain tasks which may be enumerated as follows:

1. Exploitation of the foreign banking field and the introduction of satisfactory measures looking to the retention of the foreign trade.

2. Development of the foreign relationships of federal reserve

banks themselves, which are thus far only tentative or rudimentary.

3. Creation and development of a general international discount market in which the United States should have a suitable share.

The reserve system is still laboring upon its underlying problem—that of making the system an integral factor in the financial life of the country, properly related to its business men and commercial enterprises, undertaking and performing within its own field regularly assigned functions, and serving the community not merely in “emergencies,” but as a permanent and trusted instrument.

H. PARKER WILLIS.

DETERMINANTS OF LUMBER PRICES

As bearing on the general problem of all natural resources and the specific problem of the diminishing timber supply, a searching inquiry into the price-determinants of lumber should be valuable. Such an inquiry has recently been made by Mr. Wilson Compton.¹ It is peculiarly timely for two reasons: It concerns an industry whose magnitude² in value of product is (1909) surpassed by that of only two other industries. The owners of that industry have within a twelvemonth been petitioning the Federal Trade Commission in public hearings for relief from oppressive trade conditions. The study has the further merit of being one of the few serious attempts to discover correct methods of analyzing the influences which determine the price movement of a given commodity—a subject of no little current significance.

As to the facts of wholesale lumber prices, historically considered, the inquiry shows that from 1880 to 1897, with slight increase in *actual* lumber prices, there was an almost unbroken and a very marked relative rise as compared with general prices. And for the period since 1897 it is shown that both lumber and general prices have risen almost constantly but that the former have moved more rapidly and to a relatively higher point than have the latter.³

Indicative of the method of the study, it is assumed that such influences as have caused a rise in general prices, such as a relative increase in money, have been likewise operative in their effects on the prices of lumber.⁴ It is therefore proposed to discover

¹ Wilson Compton, *The Organization of the Lumber Industry, With Special Reference to the Influences Determining the Prices of Lumber in the United States* (Chicago: American Lumberman. 1916. Pp. x, 153).

² *Thirteenth Census of the United States, 1910, Abstract*, p. 442. The value of lumber and timber products is exceeded only by that of slaughtering and meat-packing products and by that of foundry and machine-shop products. In number of establishments and in number of laborers employed the industry ranks first.

³ Compton, *op. cit.*, p. 2.

⁴ "It is assumed that lumber prices have been affected by all general price influences and that these general factors are an adequate explanation of the historical phenomena of lumber prices in so far only as such phenomena have coincided with similar phenomena, during the same period, in the movement of general commodity prices. Peculiar phenomena, however, measured by the extent and by the direction of departure from the course of general

and, so far as is possible, to evaluate those influences which cause the variation of the lumber price curve from the curve of general prices, in other words to segregate and appraise those price-determinants which are peculiar to the industry.⁵

In criticism of the general method of the study it may be seriously questioned whether there is any one influence, even that of the price symbol, money, which has a uniformly equal or proportional effect on specific prices; whether the influences which cause a general price movement necessarily appear at all or in like measure in a specific price movement; whether coincidence of specific and general price movements warrants the conclusion that the specific price movement has been affected by no peculiar influences; and, finally, whether any variation of a specific price movement from a general price movement can be apportioned as so much to this peculiar influence and so much to that.

I

Among the influences regarded by the study as of least weight and therefore worthy of small consideration are foreign trade in lumber, the tariff on lumber, labor conditions in the industry, and transportation costs of the industry's product.⁶ The treatment accorded the latter two factors does not appear wholly adequate.

Although the wage item is the largest in lumber manufacturing costs (about 80 per cent),⁷ it is not shown that wages have increased relatively no more rapidly than have average wages in other industries. So preponderant, indeed, is the wage factor in lumber manufacturing, that were other factors in all industries to remain stationary and labor costs to increase in like percentages, total costs would increase relatively more in lumber manufacturing than in the average of other industries, resulting, other things equal, in relatively higher prices. It is pointed out that labor troubles have been rare with little curtailment of output arising therefrom to which a rise in price might be attributed.⁸ But any relative prices, are assumed to have been due to peculiar influences, *i.e.*, to causes, not operative upon general commodity prices or not operative to the same degree." *Ibid.*, pp. 108-109.

⁵ *Ibid.*, p. 2.

⁶ *Ibid.*, pp. 7-18.

⁷ E. B. Hazen, Manager, Bridal Veil Lumber Co.: *Chicago Hearings before the Federal Trade Commission*, 1915, pp. 134-136.

⁸ "Since 1900 there have been occasional efforts at unionization. In 1911 'The Brotherhood of Timber Workers' newly organized among the woods-

inference drawn from the infrequency of labor troubles that wage increases have lagged behind the average of other industries is not necessarily valid. Such infrequency, it is true, might be the result of non-unionization of lumbering men, a cause in turn of a relative decline in wages, or it might be, on the other hand, the result of contentment with a rising wage. As a matter of statistics the Department of Labor shows⁹ that nominal weekly wages in the lumber industry have risen from 102.3 in 1890 to 131.3 in 1913 while general nominal weekly wages appear on good authority¹⁰ to have risen in the same period from 101.3 to 134, a percentage increase in the index number only slightly in excess of that for the lumber industry.

Nor should it be overlooked that efficiency of labor is a factor in the lumber manufacturer's labor costs as significant as money wages. Evidence on the whole may be conflicting, but testimony at the hearings of lumbermen before the Federal Trade Commission was to the effect that labor was less efficient than formerly, owing to widespread substitution of European for American and Canadian laborers.¹¹ Wages in the lumber industry increasing at approximately the same rate as general wages, efficiency of labor declining, and the wage cost proportionately larger than in other industries—such a complex should constitute a material cause for the relative increase in lumber prices.

II

The transportation costs of lumber, as developed by this study, have affected general lumber prices in the United States:

"First, when the total traffic in lumber has remained constant and the same distribution of such traffic has been maintained and mill-workers of Louisiana and Texas, was met by a brief lockout instituted by the 'Southern Lumber Operators' Association,' organized in 1906, to combat unionization among employees. A similar lockout occurred in 1912. As a rule, however, lumber manufacture has been free from the disputes which have so harassed other industries. General mill labor is unskilled; the skilled labor has been well paid. Any substantial general curtailment or irregularity of lumber production cannot therefore be attributed to adverse labor conditions." Compton, *op. cit.*, p. 18.

⁹ *Bulletin of the United States Bureau of Labor Statistics*, Nos. 129 and 153.

¹⁰ I. M. Rubinow, "The Recent Trend of Real Wages," *THE AMERICAN ECONOMIC REVIEW*, vol. IV (Dec., 1914), pp. 793-817; and *Bulletin of the United States Bureau of Labor Statistics*, No. 194.

¹¹ John R. Toole, General Manager, Lumber Department, Anaconda Mining Company, and President, Western Pine Manufacturers' Association: *Spokane Hearings*, 1915, p. 18.

among the several sources of lumber supply, while the rates themselves have been either raised or lowered;

"Second, when the rates have remained constant while the proportion of lumber from the more distant sources has increased."¹²

Increasing transportation cost of the second sort is due not to any change in transportation rates, as the study makes clear, but to relative exhaustion of the more accessible timber, a factor considered later.

With respect to changing transportation cost of the first sort due to changing rates, the two things assumed, constancy of total traffic and variation of rates, are inconsistent. Nor would a change in rates ordinarily be reflected wholly in lumber prices, as might be inferred, but in part and conversely in stumpage prices. Suppose that lumber rates should be lowered generally and relatively alike the country over. The immediate effect would be an increase of manufacturing profit, an inflow of new capital or an expansion of old firms to secure this profit, an increased output and traffic (contrary to the assumption that traffic would remain the same), and an enlarged demand for stumpage.

Competition for the lumber market with a decline in lumber prices would occur coincidentally with competition for stumpage and a rise in stumpage prices. The margin of decline in rates appearing first as a manufacturer's profit would tend to be divided between lumber buyer in lower lumber prices and timber seller in higher stumpage prices. If the elasticity of the buyer's demand for lumber were very high and that of the seller's supply of stumpage (equivalent to his demand for returns on stumpage) were very low, this margin might go almost wholly to the stumpage seller in higher prices for stumpage.¹³ Only should there be no elasticity of demand for lumber (a condition hardly conceivable with the large use of substitutes available), could we assume that under competitive conditions the total traffic in lumber would remain constant with rising or falling transportation rates and therefore that this change in rates would be reflected wholly in

¹² Compton, *op. cit.*, p. 15.

¹³ Assume these conditions as representative of the industry; \$2 per m., the price of stumpage; \$10 per m., the manufacturer's sale price of lumber at destination at which there is a demand of 1,000 m.; \$.25 per m., reduction in rates. Then, under high elasticity of demand for lumber and low elasticity of supply of stumpage a reduction of \$.05 per m. might increase the demand for lumber by 10 m. to call forth the requisite stumpage for which an increase in the price of stumpage of \$.20 per m. might be required.

a change in lumber prices. But the point especially to be noted here is that, contrary to the assumption that lumber prices would vary with transportation rates under constancy of traffic, such prices would be affected by a change in rates, if at all, only as the volume of traffic was affected thereby.

It is also a fair question to raise, whether, if rates were changed relatively alike, distribution of traffic among the several sources of lumber supply could be maintained unchanged. Until stumpage prices were adjusted to the new condition of things, a rise in transportation rates would tend relatively to shut out lumber from the distant source whose price contains a large element of carriage costs; a fall in such rates would tend relatively to shut out lumber from the near source whose price contains a small element of carriage costs.

That there have been no considerable permanent changes in lumber rates, however, either up or down during the past twenty years and that, therefore, increasing lumber prices cannot be due to this price-determinant is convincingly demonstrated by statistical evidence from authoritative sources.¹⁴ The fact is, it could probably be shown that lumber has not carried the average increase of transportation rates on all commodities and that, therefore, influences peculiar to lumber are working in the direction of higher prices to an extent which a comparison of the lumber price curve with the curve of general prices does not disclose.¹⁵

III

Unwise public land legislation was declared by the Bureau of Corporations¹⁶ to account for the alienation of much of the four

¹⁴ After citing changes in lumber tariffs since 1887 from the three principal producing regions to the three or four chief markets involving fifteen different hauls, it is added: "These statistics have been furnished directly by the Division of Tariffs of the Interstate Commerce Commission. They are up to date to Feb. 21, 1914. The changes since 1894 have not been substantial nor can they have caused any considerable change in the market price of lumber." Compton, *op. cit.*, n. 66, p. 17.

¹⁵ "Between the period of the panic of 1873 and the era of railway and industrial consolidation about 1900 there had been a gradual general decline in rates on competing lines. *The reversal of policy since that time has had little actual influence on lumber rates.* As even a partial explanation therefore of the rise in general lumber prices since 1897, changes in freight rates on lumber, on the average, have been inconsequential." Compton, *op. cit.*, p. 17. Italics are mine.

¹⁶ *The Lumber Industry, Part I*, 1913, pp. 219-271.

fifths of the country's timberland now in private hands and especially for the high concentration of its ownership in certain sections, most notably in the Pacific Northwest. That such high concentration is not an adequate explanation of rising lumber prices is evident, but that it has not contributed some considerable part to that rise and is "proof only of a situation which promises in the future to become a serious challenge to public policy,"¹⁷ are conclusions that seem to be reached by the study through an imperfect analysis of some phases of price making. For example, the "principle of competitive price fixation" is thus developed: "What then has determined the prices of standing timber in all lumber manufacturing regions of the United States? Ultimately, the anticipated prices of the lumber to be sawed therefrom. This price in turn has been *objectively* limited by the competition of lumber from other sources."¹⁸ "Prices" as first used may be assumed to mean current market prices. The "anticipated prices" may reasonably be interpreted as market prices of lumber anticipated for the future by the owners of timber, which discounted to the present determine, under the qualification of financial ability to withhold from current manufacture, their subjective timber prices. These prices are not market prices and have not "been objectively limited by the competition of lumber from other sources," except as the owner's forecast of the future has been influenced by present competition. The market price of standing timber is determined on the supply side by the subjective valuations of all timber owners, which in turn are determined by two principal considerations—a forecast of the future market by an analysis of the probable subjective valuations of future timber owners and lumber consumers and, secondly, financial ability to withhold the timber from the consuming market. Again:

To show that such potential control [concentration in timber ownership in the Pacific Northwest] has in fact been the cause of a rise in the prices of timber by creating an artificial relative scarcity of supply, it must be demonstrated that a scarcity of timber for present use, *i. e.*, manufacture, has actually existed. As long as an effective supply, sufficient to meet all current demands, has remained in the hands of the owners who have been willing to sell—or to manufacture—timber at current prices, can a scarcity distinct from that measure of scarcity due to the relative *total* exhaustion of timber supply be said to have existed?¹⁹

¹⁷ Compton, *op. cit.*, p. 69.

¹⁸ *Ibid.*, p. 63.

¹⁹ *Ibid.*, p. 62.

Scarcity of supply, however caused, whether by man's withholding (artificial) or by nature's niggardliness or destructive ways (natural), is of the same general character, *viz.*, an insufficient available *quantum* to supply all wants without money and without price; and it exerts a pressure on market price in the same upward direction. So long as a price must be paid to secure any part of that *quantum*, scarcity exists. Any timber that, converted into lumber under existing conditions and marketed at current prices, would pay manufacturing and selling expenses and competitive profits, is physically available and a part of the total *effective* supply, and exerts an influence on price by affecting the subjective valuations of buyers and sellers of timber. Any timber not thus immediately available, but which through physical growth or changed conditions of manufacture, distribution, or market may become available, forms a part of the *potential* supply; and as such affects market price through its influence on the subjective valuations of owners and speculative buyers of timber.

The withholding of any available timber from the mill restricts the amount of lumber offered at a given price, tending to increase the current price of lumber, and so affecting upward the subjective valuations of *all* available timber. It is an influence working in the same direction though not in the same measure as the destruction of such timber by fire—not in the same measure, since it is a comparison of subjective valuations of the several owners with current market prices of timber that determines the total timber offered and thus influences immediately ensuing market prices of timber. Both timber withheld and timber destroyed curtail the potential supply of lumber in the immediate future. In the one instance, however, the timber's existence, even though withheld, makes the subjective valuations of the owners of other timber lower than they would be if the timber were destroyed.

To assert, therefore, that "As long, however, as enough timber has been released at current prices to meet the entire current demand, it cannot be said that the withholding of a part of the total remaining supply of standing timber has necessarily caused an increase in the price,"²⁰ is to beg the question. It assumes that the current demand in the sense of the amount taken is a fixed thing, alone determining price, whereas it is itself determined *in part* by price, and can mean anything only as it attaches to some specific price. Price is the resultant of total demand ex-

²⁰ *Ibid.*, p. 62.

pressed by a scale of the subjective valuations of all demanders and total supply expressed by a scale of the subjective valuations of all suppliers. To withhold supply because the supplier's subjective valuation is higher than market price is to exert through limitation of supply at market price an upward influence on the immediately ensuing price quite as truly as to suppress demand because the demander's subjective valuation is lower than market price is to exert through limitation of demand at market price a downward influence on the immediately ensuing price.

The bearing of a correct analysis of price determination on the influence of concentration of ownership on price making is apparent. Concentration of *itself*, however great, does not, it will be conceded, cause higher prices. It is only as it affects withholding that it becomes a price-determining factor. It needs, therefore, only to be demonstrated (1) that concentration, through mobilization of large financial resources with the expectation of controlling the future timber supply, tends to greater withholding and (2) that high concentration does exist, to establish it as a *potential* price-making factor; and (3) that such concentration has already resulted in the withholding of larger amounts of timber from the mill than would otherwise have been withheld to establish it as an *actual* price-making influence in the setting of present high prices.

The demonstration of these propositions the study in review practically makes for us: (1) "The financial strength of many owners has enabled them to withhold their timber from use, while the increase in its value has more than absorbed the accumulated charges against the holdings, *i. e.*, taxes, insurance, interest on investments, etc. . . . Concentrated ownership and superior financial strength have been closely correlated."²¹ (2) That high concentration does exist, especially in the Pacific Northwest, is evident if we accept with the study the figures of the old Bureau of Corporations²² that: "Of the total privately owned timber in the United States, 11 per cent is owned by three corporations; . . . 31.6 per cent by ninety and 38.4 per cent . . . by one hundred and ninety-five holders. . . . Thus one-half of the privately owned timber in the Pacific Northwest is owned by thirty-eight individuals or corporations."²³ And, finally, to clinch, as it

²¹ Compton, *op. cit.*, p. 61.

²² *The Lumber Industry, Part I*, 1913, pp. 12, 20.

²³ Compton, *op. cit.*, p. 61.

were, a line of reasoning pointing to a conclusion not accepted by the study, it appears (3) that this concentration in the Pacific Northwest accompanied by extensive withholding actually began as long ago as 1894: "Extensive withholding of timber from use or sale in deliberate anticipation of higher future prices has been a comparatively recent development in the United States. . . . As a factor affecting supply, the concentration of holdings for investment cannot have been influential before the period, beginning about 1894, of the extension, directly encouraged by the railroads, of the market for West Coast lumber."²⁴

The count against concentration, then, is that it squints in the direction of monopoly. It is not that it would exert an undue upward pressure on present timber valuations were these based on an anticipated régime of free competition, but that it tends to valuations based upon the present worth of a future price determined, not in a free and open market but, through a unified control of a dominant portion of the remaining supply, by "what the traffic will bear." So long as the subjective valuations of the owners of such concentrated interest rest on the hypothesis of a free market in the future, the influence thus exerted on present prices will be no different from, nor greater than, that exerted by many small holders whose holdings in the aggregate are equal in amount, whose financial ability is proportionately as great, and whose subjective valuations are similarly based. But when, as is likely to be the case at once, concentration increases the subjective valuations of the owners of such interest, as well as those of others, to an amount equal to the present worth of near-future monopoly prices, present market prices will be increased. The concentration becomes not only a *potential* factor in future monopoly prices but an *actual* factor towards present higher prices—higher than they would be did not the blossom of concentration promise to ripen into the early fruit of monopoly.

Most (approximately 98.5 per cent)²⁵ of the timber standing at the beginning of any one year is withheld from manufacture during that year. It is not denied that much of this should be included in the potential supply of timber and has value *only* as a speculative holding. Nor is it denied that considerable is owned by small holders. But it is held that large interests, constituting

²⁴ *Ibid.*, p. 66.

²⁵ *The Lumber Industry, Part I*, 1913, p. 79. The percentage of total stand cut in 1909, a year of large cut, was 1.6 per cent.

about 55 per cent²⁶ of the total privately owned timber, contribute to the mill only a small fraction of the cut and that if their cut were in proportion to their stand lumber prices would be substantially lower.

IV

With respect to organized restraint of trade and association activities as a price-determinant the conclusion is reached that greater uniformity of lumber prices on possibly a slightly higher level has thereby been attained but that they are no considerable part of the efficient cause of the long upward movement of prices the country over. Where advances have occurred due to restraints, they have been temporary, local, and insignificant.²⁷ In this respect the study takes issue with the report of the Bureau of Corporations that "association price lists and the so-called 'individual' price lists which were formulated at conferences of lumbermen 'acting as individuals,' have had and do have an important effect on the actual sale prices of lumber."²⁸ Evidence alone, unimpeachable and ample, is competent to settle the point in dispute.

The increasing potential use of substitutes for lumber is cited as a strong deterrent to the upward tendency of prices.²⁹ To what extent this influence is peculiar to the products of the lumber industry is not disclosed by the inquiry. If it is not peculiar, *i. e.*, if it is not found here in greater measure than on the average it is found in the consumption of general commodities, it has no proper place in an explanation of the *relative* rise of lumber prices. If among price-depressing influences it is peculiar to lumber, the rise in lumber prices due to peculiar price-advancing influences is greater than a graphic comparison (such as is given in the study) of the lumber price curve with the general price curve would indicate.

²⁶ Compton, *op. cit.*, pp. 12, 13. 69.2 per cent of the timber in the investigation area (this representing 80 per cent of the total privately owned timber of the United States) was in holdings of 60,000,000 feet or more. This would equal 55.36 per cent of the total privately owned timber.

²⁷ Compton, *op. cit.*, p. 143.

²⁸ *The Lumber Industry, Part IV*, 1914, p. 12.

²⁹ Compton, *op. cit.*, pp. 126-129.

V

It is in the relative exhaustion of timber that the study finds the only adequate explanation of the relative increase of general lumber prices, *i. e.*, of the margin of increase of lumber prices over that of general prices.³⁰ Elaborate data are given to substantiate this fact of exhaustion.³¹

There are two ways in which exhaustion of timber has tended to cause an increase in the prices of lumber. First, through an increase in the cost of stumpage, logging and delivery to the mill. This effect is summed up in the higher price of logs "in the water," *i. e.*, laid down at the sawmill. Second, through an increase in the average cost of the transporting the lumber from mill to market. This means that there has been an increase in the proportion of the lumber supply which has been marketed at a high transportation cost per unit.³²

"Cost of stumpage" should hardly be included as a cause of lumber prices. It is clearly an effect of such prices just as land values are an effect of the values of land products. Practically, the "two ways" referred to above are embodied in the one factor of availability. This, together with quality, determines in timber its productivity of a given utility laid down at the point of consumption, as availability and quality of land determine its productivity of a given utility at the point of consumption. Demand remaining constant or increasing, any diminution in the total actual or potential supply of the producing agent results in a higher valuation of the utility produced.

This statement of the case, however, seems to need further clarification. Only as relative exhaustion affects the current supply of lumber relative to the demand, can it affect lumber prices; and it can affect this supply of lumber only by affecting the supply curve of timber—a curve plotting a series of subjective valuations at which the several owners would respectively part with their timber. As this exhaustion becomes more apparent and its meaning more evident, these valuations tend, other things equal, to rise, and, the demand curve of timber constant, to cause the amount of timber offered at the resultant market price to

³⁰ "Analogy to Canadian price phenomena constitutes strong presumptive evidence that natural causes, of which the most influential has been the relative exhaustion of timber supply, are an adequate explanation of the lumber price movements in the United States for the period for which statistics have been presented, 1880 to 1912." Compton, *op. cit.*, p. 124. See also p. 119.

³¹ *Ibid.*, pp. 116-122.

³² *Ibid.*, p. 116.

diminish. This appears significant in that a proper interpretation of the above qualifying phrase, "other things equal," includes the factor of financial ability to withhold supply of timber from the market, an ability almost invariably possessed by the large holder.³³ Subjective valuation of supplier is determined by his ability to withhold supply from the market quite as much as is the subjective valuation of demander by his ability to purchase.

If no one, however willing, had ability, financial or legal, to withhold timber (or any other natural resource) from use, such resource would have no *market* value. The price of the product therefrom would, with free use of resource, just equal manufacturing and distributing expense and profits. The less accessible resource would not be drawn upon till the more accessible was exhausted. With the exhaustion of the more accessible the price of the product would rise by the amount of the increase of cost of manufacture and distribution. A resource whose product had considerable elasticity of demand would tend to disappear more rapidly under such a régime of free use, since low price accompanied by elastic demand accelerates consumption. If it were deemed socially advisable that the benefit should be spread over a longer period as well as confined within national limits, a charge alike to all would be made by the government for the resource as used.

But in any case, whether consumption were fast or slow, all would share alike either in the gifts of nature (as when society collected from consumer a scarcity-relative-to-demand value distributed in turn to all on a per capita basis) or in the proportion of consumption of those gifts (as when no social limits on individual use were imposed). Such would have been the status had the government retained the title to the timber with freedom of use to all under certain common restrictions. Somewhat approximating this status is one of ownership widely scattered, as is

³³ *The Lumber Industry, Part I*, 1913, p. 106: "Persons of small means are not so likely as the large capitalists to share in the gain of timber speculation, even in proportion to their means. Persons whose property is small are likely to want a current income from it; timber held for the rise gives no current income. The small absentee owner can do nothing to protect his property from theft—a danger to which timber is particularly liable; and the speculative owner is apt to be an absentee. Moreover, timber is ill fitted for speculation on a small scale, because, as is fully shown in Chapter V (p. 178), the small owner usually gets materially less than the large owner for precisely similar stumpage."

measurably true of agricultural lands, and inequality of benefit correspondingly diminished. Concentration of ownership, on the other hand, even without monopoly conditions, throws the common heritage of all into the hands of the privileged few, who, contrary to reason that any should profit out of nature's exhaustion without rendition of service, benefit at the expense of the many. That this unearned increment in timber ownership is not small even under a degree of competition is admitted by the lumbermen themselves.³⁴

VI

As bearing upon the determination of lumber prices through the withholding of timber, two policies of the government somewhat cursorily treated by the study should be here examined.

First, state and local governments are charged by many with imposing unequal and increasingly heavy taxation burdens on timber lands. It is the fear that future taxes will, together with interest on the investment, more than absorb any future increment in timberland values (an increment itself uncertain) that constitutes the menace to the timber owner and perhaps disposes him towards a present realization on his timber. While the study asserts that "One of the most potent limitations to the withholding of timber from sale is the influence of the taxation of such property,"³⁵ it minimizes throughout (as shown above) the in-

³⁴ E. B. Hazen, Manager, Bridal Veil Lumber Company: *Chicago Hearings before the Federal Trade Commission*, 1915, pp. 146-147. He said: "Yes, I made a calculation based on \$2.50 an acre for stumpage, our timber running about 50,000 to the acre on the coast, making 5 cents, which was the original price at which the timber passed from the Government in 1890. I had that compounded up to 1915 at 6 per cent, and added one per cent for taxes and one per cent for administration, and I found that stumpage today would stand the owner if there were any such, and I don't know of any operators who have any stumpage that has cost them as little as that,—but it would stand them 34 cents and they could sell their lumber for the next 20 years and carry that load at about a fixed price."

Socially, it matters little whether present owners of a valuable stumpage or prior owners secured it a few short years ago for practically nothing. The fact remains that the aggregate holding profits of a succession of owners are enormous, amounting to 1,000 per cent, 2,000 per cent, and even 5,000 per cent, according to local conditions (*The Lumber Industry, Part I*, 1913, p. XVIII). The Weyerhaeuser purchase from the Northern Pacific is a case in point. In 1900 this tract of 900,000 acres with an average stand of 50,000 feet per acre was bought at 10 to 12 cents per m. Ten years later its average value based on sales of like timber was \$2.50 per m. (*Ibid.*, pp. 170, 208-209, 237).

³⁵ Compton, *op. cit.*, p. 6.

fluence of withholding timber on lumber prices. In the discussion on taxation, however, it is declared "that lumber prices have been affected by timber taxation, if at all, only through its effect upon the holding, and conversely upon the cutting, of timber." While admitting³⁵ that the evidence collected shows that lumber prices have been thus affected by timber taxation in certain localities and not so affected in others, the study nowhere in detail gives this evidence nor does it substantiate by evidence the conclusion so far as it pertains to taxation that "Neither taxation of timber nor the tariff has had substantial effect on average lumber prices."³⁶

The facts in the case may warrant this conclusion but neither facts cited nor reasoning followed makes clear that result. It is as though to reach this conclusion the argument, with missing links supplied, ran thus: Taxes under certain conditions constitute a menace to the timber owner's speculative profits, thus accelerating cutting; taxes under those conditions have been imposed (not proven); therefore, timber cutting has been accelerated thereby. But timber cutting has little effect on lumber supply or lumber prices (not positively affirmed here but held elsewhere); therefore, the taxation of timber has had no "substantial effect on average lumber prices." Or, the argument may be supposed to run thus: Taxes have not been such as to imperil speculative profits (the converse seems to be affirmed); therefore, timber cutting has not been accelerated thereby; and, therefore, even though timber cutting should affect lumber supply and lumber prices (not admitted elsewhere in the study), taxes as actually laid have had no such effect.

It is an almost universal complaint of lumbermen and a complaint of many forest service experts that unequal and burdensome timber taxation generally exists and is a powerful price depressor through limitation to withholding. But before this conclusion is drawn it is incumbent on the one drawing it to show either that these taxes are so heavy, even though constant, that together with interest they menace an uncertain future increment rendering the holding less profitable than immediate cutting, or that taxes now moderate but growing heavier may together with interest exceed a fairly certain future increment. If uncertainty as to both future taxes and future increment can be shown to exist with probable increase of taxes and decrease of increment

³⁶ Compton, *op. cit.*, p. 129.

an incentive to accelerated cutting is reasonably established. And before the opposite conclusion is reached, such as is drawn by the study, it is incumbent that the opposite showing be made.

If this complaint of the lumberman is borne out by facts which show that taxation is, in the judgment of the timber owner, endangering the increment over other fixed charges thus accelerating the cutting of timber and depressing the price of lumber, and if such taxation is largely peculiar to the industry, then, as in the case of lumber substitutes, the rise in lumber prices due to peculiar price-advancing influences is greater than the study's graphic comparison of lumber and general price curves would disclose, and leaves something to be explained; but if not, taxation has no place in the discussion of a relative rise in lumber prices, except as is competent to show that its burden and effect are not unusual or different.

Second, the government (largely the federal) holds the title to about 629 billion feet, more than one fifth of the total standing timber³⁷—a concentration of ownership, even after allowing for differences of quality and accessibility, many times that of the largest single private interest. The policy of the federal government today is to retain title to its timber *land* set apart as national forests, disposing of the timber, if at all, by sale for cutting within a stipulated future time. The average annual sales from the national forests for the five-year period, 1909-1913, amounted to less than one fifth of one per cent of the stand, whereas the average annual cut from all other standing timber for the same period was almost two per cent.³⁸ The government not only is the largest single holder but sells its timber for cutting at the rate of only one tenth of that of the average private holder and much less than one tenth of that of the average *small* holder—a degree of withholding which exerts an upward influence on lumber and stumpage prices exceeding that of the largest of private interests. Yet it is asserted by the study that the government's policy with respect to the sale of its timber constitutes "a check to any indefinite increase in the prices of stumpage."³⁹ The relatively small amounts of timber offered for sale, even

³⁷ *The Lumber Industry, Part I*, 1913, p. 65. 539 billion feet are in national forests.

³⁸ *Statistical Abstract of the United States*, 1914, pp. 156, 161, 162. Data from reports of the Bureau of Census and the Forest Service.

³⁹ Compton, *op. cit.*, note, p. 62.

though the minimum price is set at a low point, can have little deterrent effect on *general* lumber prices. The government's heavy ownership may be regarded as potentially a menace to future private monopoly, yet uncertainty as to its future policy respecting its own holdings only adds to the speculative element in private holdings.

If the lumber industry during the years immediately prior to the Great War was suffering more from excessive competition, overproduction, and business losses than was the average industry (as has been stoutly affirmed by its representatives before the Federal Trade Commission),⁴⁰ it appears not at all unlikely that its distress was due to private timber speculation. Herein also lies the explanation, in part, of rising and unstable prices to the consumer of lumber, contradictory as these statements may at first appear. Miscalculations respecting future conditions in the lumber market, unwarrantably high subjective valuations on timber, large withholding, high market prices of both timber and lumber, an unloading of timber at high prices on the lumberman who is buying for a long-time period—such is the train of circumstance which may set off a mine of trouble. The demand for lumber is unusually elastic, quickly responding to changes in both price and industrial conditions. If subjective valuations have raised market prices unduly high or disturbance in the industrial mechanism has produced uncertainty, curtailment of demand follows. With ability to meet his carrying charges and with faith in the future the lumberman could be expected to keep his current lumber cut within an amount he could profitably sell, thereby insuring considerable elasticity of total lumber supply and relatively small variations of price. But inability to carry fixed charges under both curtailment of individual output and probable lower prices, and fear that the future holds nothing better in store, cause the lumberman to continue output undiminished, marketing even at a present loss as preferable to greater subsequent loss. True, a great many timber owners are holding their timber in the expectation of ultimate profit if they can but weather the industrial storm. But either their faith in the future or their financial ability is not equal to the additional burden of carrying the timber of the owner forced to liquidate; or, more probably, the profitableness of overseeing and developing widely scattered small tracts under one management appears too uncertain.

⁴⁰ *Hearings at Chicago, Spokane, and Tacoma, 1915.*

It is inconceivable that prices should hold up in the face of a declining demand at the old price, supply remaining constant or increasing. A break in prices only accentuates the lumberman's haste to liquidate before irretrievable loss overtakes him, and thus ensue to the industry as a whole cumulative disastrous effects. The *relative* increase of price paid by the consumer of lumber has gone into the pockets not of the one who is playing the double role of manufacturer and speculator but of the original timber holder. If a break in lumber prices occurs it is at the expense largely of the lumberman, not as a manufacturer, but in his character of timber speculator. In any case, much of the fluctuation in lumber prices and most of the uncertainty respecting the lumberman's profit are properly charged to the timber owning and carrying function and not to the sawing and manufacturing operations.

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MARKETING FUNCTIONS AND MERCANTILE ORGANIZATION

The services that must be performed in getting commodities from producer to consumer are usually called the "functions of middlemen"; in the title of this paper they are referred to as "marketing functions" because they are not always performed by middlemen, but often to a greater or less extent by the producers themselves. When a manufacturer performs practically all of them, as, for example, when he sells through his own retail stores, it might be said that he is his own middleman; but the term "middleman" commonly means an independent merchant, rather than a part of the manufacturer's selling organization. It is therefore helpful to think of "marketing functions," rather than "the functions of middlemen" because these functions are not necessarily performed by what we ordinarily term middlemen. It should also be noted that the final consumer generally performs part of the marketing functions.

One reason why many people believe that the cost of marketing might be reduced by the "elimination of middlemen" is their failure to realize that this does not mean the elimination of marketing functions—which still have to be performed. Furthermore, many who do realize that there are functions to be performed, do not appreciate their complexity, or the difficulty and expense involved in performing them. Therefore, a classification of marketing functions is absolutely fundamental to a study of and an understanding of the marketing machinery. Although these functions have been described to a certain extent by other writers,¹ it seems worth while not only to reach as fundamental and significant a classification as possible, but to describe them in a way that will couple them up with the actual organization of the marketing process. Such is the object of this paper.

The services performed in the marketing process, including practically every item in the detailed expense account of a merchant or of the selling organization of a manufacturer, can be classified under one of the following heads: (1) assembling; (2) storing; (3) assumption of risks; (4) financing; (5) rearrange-

¹ The writer wishes especially to acknowledge the help derived from A. W. Shaw's *Some Problems in Market Distribution*. The reader will recognize frequent indebtedness to this source.

ment; (6) selling; and (7) transportation. The only important exception to this classification is the expense connected with accounting and office management, or what Shaw calls "the facilitating activities" of a business. But these are purely incidental to the primary functions enumerated above, and may properly be considered as assignable to, or incurred in connection with, their performance.

I. Assembling.

When communities were self-sufficing, there was no need of collecting or gathering commodities from distant places. But with the development of territorial specialization both in agriculture and manufacturing, the assembling of commodities from various places became a more or less difficult function to perform. The term "assembling," as used here, does not mean the actual physical transportation of commodities from one place to another, but rather the seeking out of sources, the making of business connections whereby commodities may be bought, and the study of market conditions so that they may be bought at the lowest price possible.

Assembling therefore involves all the services connected with *buying*. Many wholesale houses assemble goods from different parts of the country—even from all corners of the earth. They have their specialized buyers, who not only go to trade and manufacturing centers to buy goods, but who have to make a constant and continuous study of market conditions, sources of products, qualities, grades, styles, etc. Many large houses maintain permanent buying offices in market centers, as, for example, the dry-goods wholesalers of Chicago, who maintain buying offices in New York. It is a common practice for wholesalers and even large retailers to send buyers abroad, and some, as Marshall Field and Company, even maintain permanent buying offices in several foreign cities. But the assembling from foreign countries is largely performed by a specialized group of merchants known as importers.

Sometimes the buying function is so difficult and expensive to perform that jobbers employ independent purchasing agents in distant markets, who buy in larger lots than individual jobbers can handle, who have a more expert knowledge of market conditions and prices, and who keep their clients informed from week to week on these matters. This is common in the hardware trade.

Department stores do not rely on jobbers to assemble goods for them. They buy largely from manufacturers, which involves sending buyers to eastern markets; and some of the largest stores, especially in the East, maintain permanent buying headquarters in New York. But the majority of department stores cannot afford such expensive buying organizations, and although they send their buyers to New York, they employ either "resident buyers" or their own coöperative buying syndicates to keep them in touch with market conditions, tell them where they can buy to best advantage, execute "fill-in" orders, and to provide desk space for their buyers when they are visiting New York.

Not many years ago, it was the practice of country merchants to visit large cities perhaps twice a year to order a sufficient supply of goods for the season. This was a cumbersome and costly method of assembling; it involved loss of time, poor selection of goods, purchasing too large a stock at a time, and unsatisfactory credit conditions. The assembling function for country merchants is now taken over very largely by jobbers.

Many other examples might be given of the importance and difficulties connected with assembling. It is one of the principal functions of wholesale produce dealers and commission merchants, who send solicitors into the producing regions to make business connections, who assemble first from one part of the country and then from another as crops mature in different climates, and who make a continuous study of crop and weather conditions. Brokers often help in the assembling function, in connection with both agricultural and manufactured products, although they more commonly represent the seller than the buyer.

II. Storing.

Storing, in its broad sense, means the holding of stocks of goods at convenient points. It involves expense for warehouse or storage fees, store space, and interest on capital employed. Producers have to perform the storage function to a certain extent, but they shift it as much as possible to middlemen. Manufacturers prefer to manufacture "on order," so that they may deliver the finished goods as fast as they are turned out; but many have to manufacture "for stock," thereby keeping capital tied up in finished goods on hand. When manufacturers sell direct to retail stores, or to consumers through their own retail stores, they have to keep a large stock of finished goods on hand, not only at factory, but often at

convenient places throughout the country, thus assuming the expense of performing the storing function, instead of shifting it to middlemen.

Retailers perform this function by keeping the shelves of their stores filled with goods. The tendency is for middlemen to reduce it as much as possible by purchasing goods in small quantities and very frequently; because small stock in proportion to sales means faster turnover and larger net profits. This tendency is especially noticeable among retailers, who shift the storing expense as much as possible to jobbers. Jobbers in turn always have warehouses with complete stocks, and the fact that retailers are buying in smaller and smaller quantities, but more frequently, accounts largely for the development of small jobbing centers, as in the grocery trade, and for the establishment of branch houses by large jobbers, as in the hardware trade. In other words, the jobber needs to be as near the retailer as possible, so as to supply his wants with a minimum of delay. The jobber also desires to order from the manufacturer as little as possible at a time, and this has the tendency of forcing manufacturers to carry a stock of finished goods. About the only middlemen who perform practically no storage function are brokers, manufacturers' agents, and purchasing agents.

The storing function is so difficult and expensive to perform in some cases that it is taken over by a specializing set of warehousemen. General warehouses are found in all large cities, and in them all conceivable commodities are held. A sugar refiner on the Atlantic Coast, for example, needs to keep supplies of sugar on hand at large distributing centers throughout the country, and he has the choice of building and maintaining his own warehouses or renting space in public warehouses. He finds it cheaper to pursue the latter course. The large meat-packers, on the other hand, find it to their advantage to maintain their own warehouses, partly because they require a specialized service and equipment not furnished by ordinary warehouses, and partly because they do business in large volume. Agricultural products, which are seasonal in character, demand special forms of storage facilities, usually furnished by independent warehousemen. Cases in point are grain elevators, cotton warehouses, and tobacco warehouses. And when the element of preservation enters in, cold storage houses are required. The storage function has to be performed all along the line, from producer to consumer. Even the consumer, when he

buys goods in large quantities, performs part of the marketing function of storage; but the tendency has been for the consumer to shift this function back more and more to middlemen.

III. The assumption of risks.

Inasmuch as commission merchants, brokers, and agents do not take title to goods, they assume very few of the merchandising risks; but practically every other middleman, as well as the manufacturer, especially when he produces for stock, has to consider the element of risk. The principal kinds of merchandising risks may be enumerated as follows: (1) price fluctuation, (2) destruction by fire, (3) deterioration in quality, (4) style changes, and (5) financial risks.

Perhaps the most important risk is that of price fluctuation; but its importance varies for different commodities. Branded and advertised articles are relatively stable in price, though during war times they too suffer somewhat from price changes. The risk of price fluctuation is greater to wholesalers than to retailers because of the smaller margins on which the former carry on business. Many articles handled by wholesale grocers, such as flour and sugar, fluctuate in price very frequently and are handled on extremely small margins, and the merchandising risk accordingly becomes great. When one buys or sells with the idea of making a profit from mere price fluctuations, he becomes a speculator. In this sense wholesale grocers often speculate in flour and sugar and some other commodities, and oftentimes a large part of their net profits (or losses) is due to this feature of their activities. In the case of a few raw products—wheat, corn, oats, flaxseed, cotton, sugar, and coffee—price changes are frequent, merchandising risks are great, and speculation becomes an important factor. Much of the merchandising risk is shifted through the hedging process to professional speculators, a specialized class of risk-assumers.

The risk of destruction by fire is largely shifted to insurance companies. Deterioration in quality is a danger affecting principally perishable articles, but to some extent is also a risk factor for general merchandise, which may become shopworn. Many articles need special facilities for their handling—warm rooms, dry rooms, refrigerated rooms, etc.; and the storage houses, as well as the railroads, help in the prevention of deterioration. Style changes in manufactured goods are analogous to perish-

ability of farm products. They constitute an important risk factor in men's and women's wear, especially the latter; and the frequency of style changes appears to be increasing, as exemplified recently in eye glasses and women's footwear. Financial risk appears in loss from uncollectible accounts, but may be largely overcome by the maintenance of credit departments. Financial risk is also involved in the other forms of financing described below.

IV. Financing.

As explained by Shaw, middlemen were formerly merchandise bankers. This function has been largely taken over by banks, which in this sense are middlemen of a specialized kind. And yet we should not lose sight of the fact that middlemen still perform extremely important financing functions, and in a variety of ways. Perhaps the most important is the granting of credit—retailers to consumers, jobbers to retailers, and sometimes manufacturers to jobbers. In many cases, however, the manufacturer has to be financed: as in the cotton trade, where commission houses make advances or endorse the mill's paper; or in the silk trade, where raw silk dealers furnish the raw material on six-months' time. Furthermore, manufacturers are commonly financed by being allowed to draw drafts on day of shipment, a method also common in financing shippers of farm products.

The financing function involves the tying up of capital, with resulting interest charges, also a line of credit with banks and the expenses connected with accounts and collections. On the whole, the brunt of the financing burden is borne by the wholesale trades, or sometimes by commission merchants. Retailers and consumers are generally weak so far as accumulation of capital is concerned, and on the other end of the marketing chain, manufacturers generally find it difficult to finance their own undertakings; so that the financing function of the wholesale intermediaries commonly extends in both directions. This is especially true in the marketing of farm products. Furthermore, the wholesalers, because they are located in trade centers and have quick assets, are the ones who are in the best position to obtain credit from banks.

V. Rearrangement.

Rearrangement of commodities involves sorting, grading, breaking up large quantities into small units, packing, etc. This is one of the principal functions performed by many merchants in

raw materials. Wool dealers, for example, in addition to their assembling and financing functions, are practically indispensable to manufacturers on account of the fact that they are important as graders and classifiers, and stand ready to furnish the particular quality of wool desired at any time. In the farm-products trade, sorting and grading are of supreme importance; furthermore, these commodities reach large cities in carloads, and have to be split up into small quantities, according to the demands of individual retailers. This function is important even in the marketing of standardized and non-perishable commodities; wholesalers often receive goods in bulk, and have to weigh them out and package them. Goods that are already packaged when they reach wholesalers are usually put up in cases or cartons, but owing to the tendency among retailers to buy in smaller quantities, cases have to be broken open, goods in one third or one sixth of a dozen lots collected from the different cases, and repacked for shipment. This is becoming a serious problem in the drug trade, for example, where each retailer has to handle such a large variety of proprietary medicines. A wholesale grocer recently told the writer that his "broken-package room," was "the most expensive room in the building." Some wholesalers charge their retail customers higher prices for broken-package or broken-case lots. Even retailers have the function of rearrangement to perform to a certain extent. They have to weigh out sugar, coffee, nails, wire, etc., and measure and cut cloth; then they have to wrap for presentation to customers. Thus it is seen that breaking up large quantities into smaller units, sorting out according to quality, and packing and wrapping are functions that have to be performed by middlemen all along the line.

VI. Selling.

Selling is the most important of the marketing functions, as well as the most costly one to perform. Salaries of salesmen (plus traveling expenses in many cases) constitute generally the most important single item in a merchant's expense account. Selling involves both creating a demand for the goods and getting the goods into the hands of the purchaser. Though both of these phases of selling are performed largely by personal salesmen, demand creation is being accomplished more and more by means of advertising. Advertising is used either because it is the only possible way of creating a large consumer demand, or because it is

the cheapest way of arousing such a demand. When a manufacturer advertises, he turns over the actual work of preparing copy, selecting mediums, etc., to another functional specialist—the advertising agency.

It is still necessary for most manufacturers, jobbers, and retailers to employ personal salesmen, but because of the great expense attached to this method, it is only natural that many of the important recent attempts to reduce merchandising costs should have been along the line of eliminating salesmen's salaries as much as possible. The mail-order houses, both wholesale and retail, do away with salesmen altogether; local buying syndicates among retail druggists effect their principal saving by substituting the telephone for salesmen; the slot-machine does away with salesmen, and the slot-machine type of retail store, like the Horn and Hardart restaurants and the "all-package" grocery stores, seems to be gaining ground.

The employment of salesmen involves the maintenance of a sales organization (sometimes an extensive one), the determination of the best way to pay salesmen, their selection and training, the control of their traveling expenses, the use of samples, etc., all of which means expense to the manufacturer or middleman performing the selling function.

VII. Transportation.

As explained by Shaw, merchandise middlemen formerly attended to the actual carriage of goods from one place to another more than they do now; but this function has been largely taken over by railroads and other transportation agencies that are specialized middlemen in this field. Transportation, however, is still an important function of merchants. Wholesalers and retailers frequently use their own trucks for hauling goods from freight stations to their stores, though more commonly drayage companies are employed.

The principal transportation function still performed by merchandise middlemen is that of delivering goods from store to customer. Delivery expenses form a considerable item for most jobbers and retailers, as well as for manufacturers who sell direct to the retail trade. For such middlemen as milk distributors, the delivery function becomes an exceedingly expensive one to perform. Some department stores and grocery stores carry their delivery services to an almost absurd degree—a situation brought

about by the unreasonable demands of shoppers and by keen competition among the stores for business.

There appears to be a tendency in some directions to curtail delivery expense by asking customers to take goods home with them, by making only a certain number of deliveries per day, or even per week, and by giving a special discount to customers who carry goods home. Many stores save by making no deliveries at all. The carriage of goods from store to consumer's residence has to be performed, and it is simply a question whether the consumer is willing to perform this function, or pay to have it performed for him. The five-and-ten-cent stores deliver only purchases exceeding a certain minimum value. In some cases retail stores located in the same city turn over the delivery function to specialized delivery companies, or even have their own coöperative delivery companies, thus eliminating wastes due to duplication of equipment, and to covering and re-covering of the same territory.

As already stated, a clear conception of the marketing functions is fundamental to a proper understanding of the mercantile structure. The splitting up of the marketing process among successive middlemen is merely a case of specialization in marketing functions. The organization of any trade is characterized by the extent to which the functions are divided among several middlemen or are "integrated" in the hands of few middlemen or in the hands of the producer himself, just as any industry is characterized by the extent to which the "manufacturing functions" are specialized among several independent plants, or are integrated or consolidated in one plant or under one ownership. The tendency in modern merchandising appears to be for the manufacturer to assume more and more of the marketing functions, and the problem of how far he should go in this matter is one that is bothering many a manufacturer today. In some cases, the manufacturer performs practically none of the marketing functions; he employs a commission merchant (as in the textile trade), a "manufacturer's agent" (as in the hardware trade), or a broker (as in the sugar trade). He then needs no sales organization, not even for reaching jobbers. The agency that he employs becomes the equivalent of the manufacturer's selling organization; and when a manufacturer uses this method it is for the simple reason that such an agency can perform the marketing functions more cheaply than he himself can perform them, which is especially true

of small manufacturers who make a single product or small variety of products. The selling agent effects his principal economies by handling the outputs of several mills, and thereby reducing the selling cost per unit of goods sold.

Most manufacturers employ no intermediary in reaching jobbers, but go to them direct. This requires the manufacturer to maintain a sales organization, to employ salesmen, to assume merchandising risks, etc. In the textile trades, the American Woolen Company and some of the largest cotton mills "sell direct," which means that they sell direct to jobbers and the "cutting-up trade," rather than direct to retailers. Selling direct to jobbers usually requires relatively few salesmen, for goods are sold in large units, and the manufacturer has relatively few customers, all of whom are "good pay." It enables the manufacturer to manufacture largely "on order" rather than "for stock," hence reducing the storage function.

Other manufacturers assume still more of the marketing functions and "do their own jobbing," thereby selling direct to the retail trade. Such an undertaking demands an extensive and expensive selling organization, a very large number of salesmen (to perform the selling function), frequently the establishment of branch offices dealing with and giving credit to thousands of retailers who are "slow pay" (financing and risk functions), the manufacture of goods for stock (storage function), and sometimes the delivery of goods to retailers (as is done by the National Biscuit Company). Well may a manufacturer hesitate before he undertakes to develop the organization and assume the expense of performing these functions. Many a manufacturer has thought it over, and decided that the jobber can do these things for him more cheaply than he can do them himself.

Although the writer has no intention of discussing in this place the reasons for the tendency of manufacturers in some lines to assume these marketing functions, it should perhaps be noted that other considerations than mere cheapness or economy in marketing are often the controlling motives—such as better pushing of advertised goods, control of resale prices, etc. In fact, it is a question whether goods marketed direct to retailers by manufacturers are done so any more *cheaply* than if they were sent through the hands of jobbers; probably the contrary is true in many instances. At least, when goods are marketed in this

way, they usually do not reach retailers at any lower price than when they go through jobbers—except in the case of very large retailers who buy in “jobbing quantities.”

It is needless to carry this analysis further and to show how the manufacturer assumes even more of the marketing functions when he sells to consumers through his own retail stores. What has already been said is perhaps rather obvious, but it illustrates the value of thinking of these questions of commercial organization in terms of the marketing functions. It may not be amiss to call attention to the fact that while the manufacturer has tended to assume more of these functions, the consumer, on the other hand, has tended to perform fewer of them. He (or rather she) goes to market for foodstuffs less frequently and dislikes to carry goods home with her. Furthermore, she either dislikes or is unable to perform the storing function, and hence buys supplies from day to day. When she goes shopping for clothing and household goods she is performing the “assembling” function, but the department store has helped her out in this particular by “assembling” all manner of goods under one roof.

As the writer began his studies of marketing in the field of agricultural products and has since extended his investigations to include manufactured products, he has been particularly interested in comparing the methods of marketing these two general classes of products. There are many noticeable differences, including the following: There is a greater diversity of methods in the marketing of manufactured products; exchanges play a more important part in the farm products trade; farm products are more commonly sold at auction than manufactured goods; and the wholesale trade in manufactured goods is concentrated in fewer houses, which do a greater average volume of business and which cover wider territories.

But the most interesting difference lies in the fact that there is greater functional specialization in marketing farm products than in marketing manufactured products: in other words, that farm products pass through the hands of a greater number of successive middlemen. Furthermore, there is a distinct tendency in the selling of manufactured products toward the “elimination of middlemen,” or rather toward the taking over of the marketing functions by producers—a tendency that is not apparent in the handling of farm products. In the farm products trade, for example, there is usu-

ally a country shipper—a middleman that has no counterpart in the manufactured goods trade. Also the wholesale distribution of farm products is commonly divided between two agents—the wholesale receiver or commission merchant, who assembles large quantities from various and far-away localities; and the jobber, who sells in small quantities to hundreds of retailers. In the wholesale trade in manufactured products there is no such important division between two functional specialists, although the commission house, manufacturer's agent, and broker, described above, sometimes appear between manufacturer and wholesaler.

What are the reasons for the greater functional specialization in marketing farm products? In answering this question one is helped by referring again to the marketing functions. In general, it may be said that these functions are harder to perform in the case of farm products, and the more difficult they are to perform, the greater need of specialization. The risk in farm products is greater because they are perishable and because their prices are more fluctuating; they are produced seasonally, and hence the storage function becomes more important; they are not so well standardized, and hence the sorting, grading, and packing (or rearrangement function) is more difficult to perform; the producing unit (the individual farm) is much smaller than for manufactured products, which means that the assembling function has to be performed by a country shipper, or sometimes by a coöperative shipping association. The fact that farm products mature first in one section of the country and then in another, also complicates the assembling function for wholesale dealers. Farm products are sold through a larger number of retail outlets than are most manufactured goods, and hence the selling function is more difficult. Without going into detail, the division of the wholesale trade between two successive middlemen can be explained only in terms of functions performed; in this case it will be found that the wholesale receiver or commission merchant specializes in the assembling, storing, and financing functions, and that the jobber specializes in sorting, selling, and delivery. The risk function is divided between the two, except in the case of commission merchants, who do not take title to the goods, and who shift the risks largely to country shippers.

In closing, it may be mentioned that one other feature of this classification of marketing functions is its value to the scientific student of marketing subjects in performing his research work or

trade investigations. With these functions in mind, he can approach practically any kind of dealer or trader and ask a fairly intelligent and comprehensive set of questions without knowing much of anything about the trade. For example, suppose one wishes to study flour brokers. Begin with the assembling function, and ask: For what class of mills do you sell flour? Where are they located? For how many mills do you sell? Under what arrangement do you handle flour for your principals? etc. Then take up the storage function, and ask: Do you keep flour on hand for your principals? If so, is it kept in a public warehouse? Who pays storage fees? Why and how long is it kept on hand? etc. By going through the list in this way, and by having a certain amount of merchandising knowledge which makes one answer suggest another question, an investigator can find out practically everything he needs to know of the functions of any class of traders.

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REAL WAGES IN RECENT YEARS ¹

Those who are inclined to argue that the real wages index numbers of the Bureau of Labor report² of July, 1908, furnish grounds for optimism on the part of the laborer (and there were and possibly still are many such) have a worthy opponent in Dr. I. M. Rubinow. Eliminating the fluctuations by use of the moving average,³ this writer, in the *AMERICAN ECONOMIC REVIEW* for December, 1914, shows that in the trend of the series there is little encouragement to be found for the laborer. Dr. Rubinow is not willing to stop here, however. Taking advantage of certain later data, he has computed a series of index numbers purporting to show the trend of real wages from 1890 to 1912. In attempting this task he had certain difficulties to face. In the first place, the Bureau of Labor in 1908 ceased publishing information concerning either retail prices or wages. And it was not until 1912 (Bulletin No. 105) that a continuation was made of the study of these matters. For certain reasons when this work was continued the retail prices of only 15 articles of food from some 39 of the more important cities (instead of 30 articles from 68 localities as had been the case with the old series) were studied. An index, however, representing the price of these 15 articles running over the period 1890-1912 was constructed. Changes were also made in the form of presentation

¹ A critique of Dr. I. M. Rubinow's article on "The Recent Trend of Real Wages," published in the *AMERICAN ECONOMIC REVIEW*, vol. IV (December, 1914), p. 791.

² Bulletin No. 77. The series is as follows:

Year	Index	Year	Index
1890.....	98.6	1899.....	101.7
1891.....	97.1	1900.....	103.0
1892.....	99.4	1901.....	100.7
1893.....	96.9	1902.....	98.5
1894.....	98.0	1903.....	101.8
1895.....	100.6	1904.....	100.4
1896.....	104.2	1905.....	101.4
1897.....	103.0	1906.....	102.4
1898.....	101.2	1907.....	101.5

³ Series known as the moving average is as follows:

Five-year period	Index	Five-year period	Index
1890-1894.....	98.0	1897-1901.....	101.9
1891-1895.....	98.4	1898-1902.....	101.0
1892-1896.....	99.8	1899-1903.....	101.1
1893-1897.....	100.5	1900-1904.....	100.8
1894-1898.....	101.4	1901-1905.....	100.8
1895-1899.....	102.1	1902-1906.....	100.7
1896-1900.....	102.6	1903-1907.....	100.8

of the wage data, no index running over the whole period with the average of 1890-1899 as a base being computed. Fortunately enough information was given to enable Dr. Rubinow to construct such an index.⁴ Using these figures in conjunction with the new index numbers of the retail prices, he computes a series representing real wages over the period 1890-1912. Table 1, taken from his article,⁵ brings his figures together. Chart I, accompanying it, presents graphically his findings.

TABLE 1.—COMPUTATION OF INDEX OF REAL WAGES, 1890-1912.¹

Year	Hours per week	Wages per hour	Full time weekly earnings per employee	Retail prices of food	Purchasing power measured by retail prices of food	
					Hourly wage	Weekly wage
1890	100.1	100.2	101.3	101.9	98.3	99.4
1891	100.9	99.9	106.8	103.4	96.6	97.5
1892	100.7	100.3	101.0	101.6	98.7	99.4
1893	100.4	101.2	101.6	104.1	97.2	97.6
1894	99.2	98.9	98.1	99.2	99.7	98.9
1895	99.8	98.6	99.2	97.1	101.5	102.2
1896	99.7	100.0	99.7	95.2	105.0	104.7
1897	99.5	99.6	99.1	96.7	103.0	102.5
1898	99.6	100.2	99.8	99.7	100.5	100.1
1899	99.2	101.4	100.6	100.8	100.6	99.8
1900	98.6	104.7	103.2	103.0	101.6	100.2
1901	98.1	107.0	105.0	108.5	98.6	96.8
1902	97.4	112.0	109.1	114.6	97.7	94.3
1903	96.7	115.5	111.7	114.7	100.7	97.3
1904	96.0	116.3	111.6	116.2	100.0	96.0
1905	96.0	119.6	114.8	116.4	102.8	98.6
1906	95.4	123.6	117.9	120.3	102.7	98.0
1907	95.1	129.3	123.0	125.9	102.7	97.7
1908	94.5	128.5	121.4	130.1	98.8	93.0
1909	94.4	129.9	122.6	127.2	94.7	89.4
1910	93.8	134.0	125.7	144.1	93.0	87.2
1911	93.3	136.3	127.2	143.0	95.3	88.9
1912	93.0	141.5	131.6	154.2	91.8	85.3

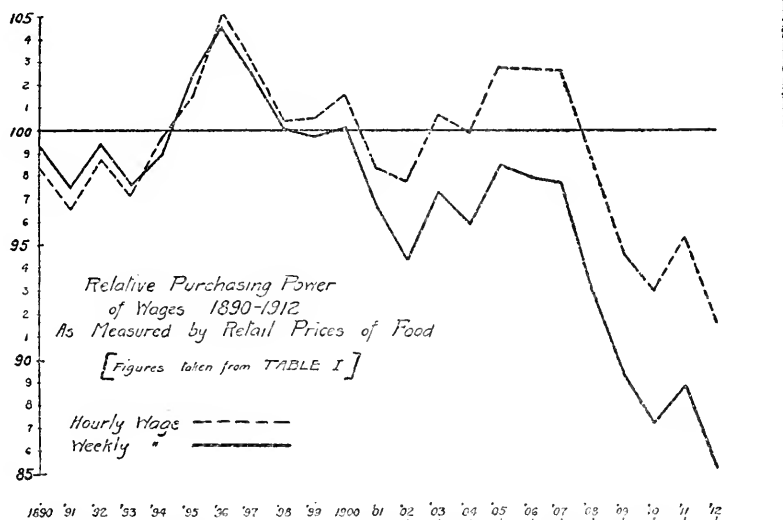
¹ Taken from page 811 of Dr. Rubinow's article.

These figures even more than the ones previously computed by the Bureau of Labor offer the wage-earner small cause for rejoicing. And yet the data from which these figures are computed leave, we are forced to admit, much to be desired. No one, perhaps, more than Dr. Rubinow himself realizes the need of caution

⁴ For detailed information as to method of procedure see *AMERICAN ECONOMIC REVIEW*, vol. IV, pp. 793-817.

⁵ P. 811.

Chart I



in drawing conclusions from data so limited. He warns us as follows:⁶

Before these sweeping conclusions may be accepted, their general trustworthiness should be carefully scrutinized. It will be argued with justice that they are based upon an indifferent assortment of statistical data. Even up to 1907 the "index of real wages" derived from the above table is much more gloomy than the official index published in Bulletin 77 for the last time. . . .

It is necessary, therefore, to examine the table⁷ critically comparing it column by column with the similar table published in Bulletin 77 (p. 7). Such an examination will show that the index of "hours of labor," although independently computed here, is practically identical with the official index (in 1907, 95.1 against 95.0). The same is true of the index of wages per hour (129.3 as against 128.8 in 1907); and as a result the derivative indexes of "full time weekly wages" are not very far apart (in 1907, 123.0 against 122.4).

The real difference is found in the "retail prices of food" (in 1907, 125.9 against 120.6 in the old index). This difference, however, it will be remembered, has not been introduced by the writer. It is the new "official" index of Bulletin 105 as compared with the old "official" index of Bulletin 77.

And he also says:⁸

⁶ P. 812.

⁷ See Table I, p. 320.

⁸ P. 801.

It is possible that the omitted articles⁹ are those which have not risen in price quite as violently as some of those retained. The prices of coffee, tea, molasses, rice, prunes, salt beef or pork, etc., have surely not been so sensitive to price increase as were sirloin steak, pork chops, or strictly fresh eggs. It may be questioned how far *any changes* in the price of such luxuries as sirloin steak, pork chops, and eggs "strictly fresh," would affect the status of the wage-worker's family. From this point of view the earlier figures would appear to be somewhat more reliable, yet we have the official statement of the bureau (Bulletin 105, p. 6) that "these fifteen articles represent approximately two thirds of the expenditures for food by the average workingman's family."

The present writer, therefore, no more desires to make, than he feels prepared to sustain, a sweeping condemnation of Dr. Rubinow's study. He has only praise for the work. The importance and timeliness of Dr. Rubinow's subject, and the shadow of suspicion cast upon his results by their difference from the old series, prompts the desire, however, to "scrutinize carefully the general trustworthiness of the figures." The preparation of his wage index, though accomplished by combining what would seem rather heterogeneous material, was by him step by step carefully scrutinized and cautiously done, and, on the whole, would seem above serious criticism. The credibility of the series is also greatly enhanced by its close correspondence with the older index.¹⁰ It appears reasonably probable, therefore, that the wage figures are fairly representative.

With the relative prices of food, however, the situation is somewhat different. Here not only have we a very limited list of

⁹ (a) Articles quoted up to 1907, and also for 1907-1913:

1 Sugar, granulated	6 Lard, pure	11 Sirloin steak
2 Wheat flour	7 Corn meal	12 Ham, smoked
3 Butter, creamery	8 Eggs, strictly fresh	13 Pork chops
4 Milk, fresh	9 Hens	14 Bacon, smoked
5 Rib roast	10 Round steak	15 Potatoes, Irish

(b) Articles quoted up to 1907, but omitted for 1907-1913:

1 Coffee	6 Molasses	11 Prunes
2 Tea	7 Beef, salt	12 Fish, salt
3 Veal	8 Beans, dry	13 Mutton
4 Vinegar	9 Pork, salt	14 Apples, evaporated
5 Bread, wheat	10 Fish, fresh	15 Rice

¹⁰ I am aware of the criticism that can with truth be made that the figures are "full time" wages, and thus cannot be taken as a measure of actual income of the wage-earner who may not be able to find full time employment. Yet in the absence of figures with regard to unemployment, the study of the full time wage may be recognized as worth while.

articles included—a fact in itself justifying some skepticism as to the representativeness of the material—but our suspicions are also aroused by the knowledge that the new index covering the 15 articles by no means agrees with the older list covering 30. Is there no way by which we may test the trustworthiness of this new series? A comparative study of the two index series may throw some light on the subject. Proceeding, let us first discover, if we may, why the two series differ. Since the two are based on the same price lists, the difference must be due either to the difference in methods of computation¹¹ used, or to the fact that the old series includes articles which the new one omits. In principle the two methods are essentially different, and in general the later method is certainly to be preferred. The question confronting us, however, is, Has the difference in methods given rise in this case to substantially different results?

To recompute the old series using the new method is, of course, out of the question. A comparison of the relative price of several individual articles as computed by the old and by the new method is given in Table 2. Each of these relative prices was made up from several quotations. A glance at the table shows that the difference in no case is significant. When the variation in methods gives rise to no significant differences in the relative prices of the individual articles, although in the case of each article the price was compounded of numerous samples, it is not likely that any serious discrepancy in the series as a whole would be due to method. To this evidence add the fact that for a period of eight years the old and new series almost coincide, although the differing methods apply to the whole period, and it is obvious that we must look elsewhere for the cause of the difference in the curves. On the other hand, what evidence, other than general impressions regarding prices, have we that the divergence is due to “a one-sided selection of articles”? To answer this question I have prepared series of indexes¹² covering the omitted articles (see Table 3).

¹¹ For the reasons for change in method of computation and the difference in the methods see Bulletin No. 156, p. 364.

¹² The series was obtained by striking a simple average of the indexes of the 15 omitted articles. In the light of facts presented above anent the accuracy of the old and new methods I feel that no serious error has been introduced in this computation. It is shown in Bulletin No. 77 that there is no significant difference between the weighted and the simple average in the old series. I have assumed that the simple average in our case was reasonably accurate.

TABLE 2.—RELATIVE RETAIL PRICES OF SEVERAL ARTICLES AS COMPUTED BY OLD AND NEW METHODS.
O. S. signifies Old Series; N. S. signifies New Series.

Year	Butter		Flour, wheat		Lard		Poultry		Eggs		Corn meal		Potatoes, Irish	
	O. S.	N. S.	O. S.	N. S.	O. S.	N. S.	O. S.	N. S.	O. S.	N. S.	O. S.	N. S.	O. S.	N. S.
1890	99.2	99.2	109.7	110.2	98.2	98.5	101.3	102.8	100.6	100.3	100.0	101.3	109.3	109.0
1891	106.4	105.7	112.5	112.4	99.8	100.0	104.0	104.8	106.9	105.6	109.7	111.5	116.6	117.1
1892	106.8	106.8	105.1	104.0	103.6	104.4	103.8	104.2	106.8	103.3	105.2	107.7	95.7	95.4
1893	109.9	108.6	96.1	95.1	117.9	119.2	104.2	104.3	108.1	105.5	103.1	104.0	112.3	111.8
1894	101.7	102.0	88.7	88.3	106.9	106.4	93.6	98.2	96.3	97.4	102.2	104.4	102.6	101.8
1895	97.0	97.4	89.0	89.6	100.1	99.8	98.4	97.3	99.3	98.8	100.8	101.0	91.8	90.6
1896	92.7	93.1	92.7	94.2	92.5	92.1	97.1	96.1	92.8	90.3	95.0	92.8	77.0	78.8
1897	93.1	93.7	104.3	104.7	89.8	89.0	94.0	92.3	91.4	94.0	93.7	91.2	93.0	92.5
1898	95.1	95.8	107.4	106.9	93.9	93.5	96.8	96.8	96.2	97.9	95.0	92.9	105.4	103.9
1899	97.7	97.6	94.6	94.8	97.1	97.1	101.8	103.4	101.1	101.6	95.1	92.9	96.1	98.8
1900	101.4	101.2	94.3	94.6	104.4	104.9	100.8	99.6	99.9	99.1	97.4	95.6	93.5	92.8
1901	103.2	103.0	94.4	94.9	118.1	119.6	103.0	105.0	105.7	107.7	107.1	107.6	116.8	114.0
1902	111.5	109.8	94.9	95.6	134.3	135.6	113.2	113.6	119.1	119.4	118.8	123.9	117.0	116.7
1903	110.8	110.2	101.2	102.1	126.7	126.0	118.5	119.3	125.3	125.1	120.7	122.1	114.8	114.7
1904	109.0	108.1	119.9	118.9	117.3	116.3	120.7	120.6	130.9	131.1	121.5	122.9	121.3	119.0
1905	112.7	111.4	119.9	118.6	116.6	115.8	123.6	123.6	131.6	131.3	122.2	123.5	110.2	109.3
1906	118.2	118.3	108.1	108.3	128.0	127.3	129.1	128.0	134.2	134.2	123.2	124.5	114.4	114.6
1907	127.6	127.3	117.7	118.2	134.2	133.5	131.4	131.3	137.7	138.2	131.6	133.5	120.6	122.2

TABLE 3.—COMPUTATION OF SERIES INCLUDING THE OMITTED FIFTEEN ARTICLES.

Year	Coffee	Tea	Veal	Vinegar	Molasses	Beef, salt	Beans, dry	Fish, fresh	Salt fish	Mutton	Apples, evaporated	Rice	Prunes	Pork, salt	Average
1890	105.4	100.0	98.8	102.9	104.7	97.5	103.3	99.6	100.7	100.7	109.0	101.3	116.8	95.3	102.6
1891	103.2	100.4	99.6	105.5	101.7	98.3	106.2	99.6	101.7	100.6	110.3	102.5	116.5	98.9	103.4
1892	103.8	100.2	100.0	102.7	101.2	99.5	102.4	100.1	102.2	101.0	99.3	101.3	113.5	100.5	102.0
1893	104.8	100.1	100.0	99.5	100.6	100.3	105.0	100.1	103.4	99.9	107.0	98.4	115.6	108.7	103.1
1894	103.3	98.7	98.7	99.8	100.3	98.9	102.8	100.4	101.5	97.8	105.8	99.0	100.9	103.4	100.8
1895	101.7	98.5	98.5	98.9	99.6	99.6	100.5	99.8	98.9	98.7	97.4	98.8	94.2	99.2	98.8
1896	99.6	98.8	99.5	97.2	98.7	99.8	92.7	100.2	97.5	98.7	88.6	96.7	86.8	95.5	96.4
1897	94.6	98.5	99.9	97.4	97.7	100.9	91.5	99.8	95.2	99.6	87.8	97.9	84.3	97.3	95.9
1898	91.1	100.7	101.2	97.9	97.9	102.1	95.9	100.5	98.8	100.4	95.4	101.7	86.3	99.1	97.8
1899	90.5	104.4	103.7	98.3	98.2	103.2	99.7	100.2	100.2	102.6	99.5	102.4	85.1	101.8	99.3
1900	91.1	103.5	104.9	98.5	102.2	103.7	110.0	100.4	99.1	105.6	95.2	102.4	83.0	107.7	100.7
1901	90.7	106.7	108.8	98.9	101.3	106.1	113.9	101.4	100.9	109.0	96.8	103.5	82.6	117.5	102.7
1902	89.6	107.2	115.2	99.5	102.1	116.0	116.8	105.0	102.8	114.7	104.4	103.5	83.4	132.5	106.6
1903	89.3	106.0	114.9	99.1	103.8	108.8	118.1	107.3	108.4	112.6	100.8	103.9	80.2	129.0	105.9
1904	91.8	105.8	115.5	98.9	104.0	108.3	116.8	107.9	111.7	114.1	99.2	101.6	79.6	125.8	105.8
1905	93.6	105.7	117.7	100.3	104.4	107.9	116.3	109.9	113.8	117.8	106.0	102.6	81.4	126.0	107.4
1906	94.7	105.5	123.2	102.6	105.3	110.8	115.2	116.2	116.8	124.1	115.6	105.7	85.1	136.9	111.3
1907	95.0	105.3	125.0	104.5	107.7	114.1	118.8	120.6	121.6	130.1	124.6	108.5	88.4	141.2	114.7

The old series, the new series covering 15 articles, and my own series covering the omitted 15 articles have been brought together in Table 4 and graphically presented on Chart II. It will be readily seen that just at the time (about 1897) when the new series begins to rise above the old one, the series representing the

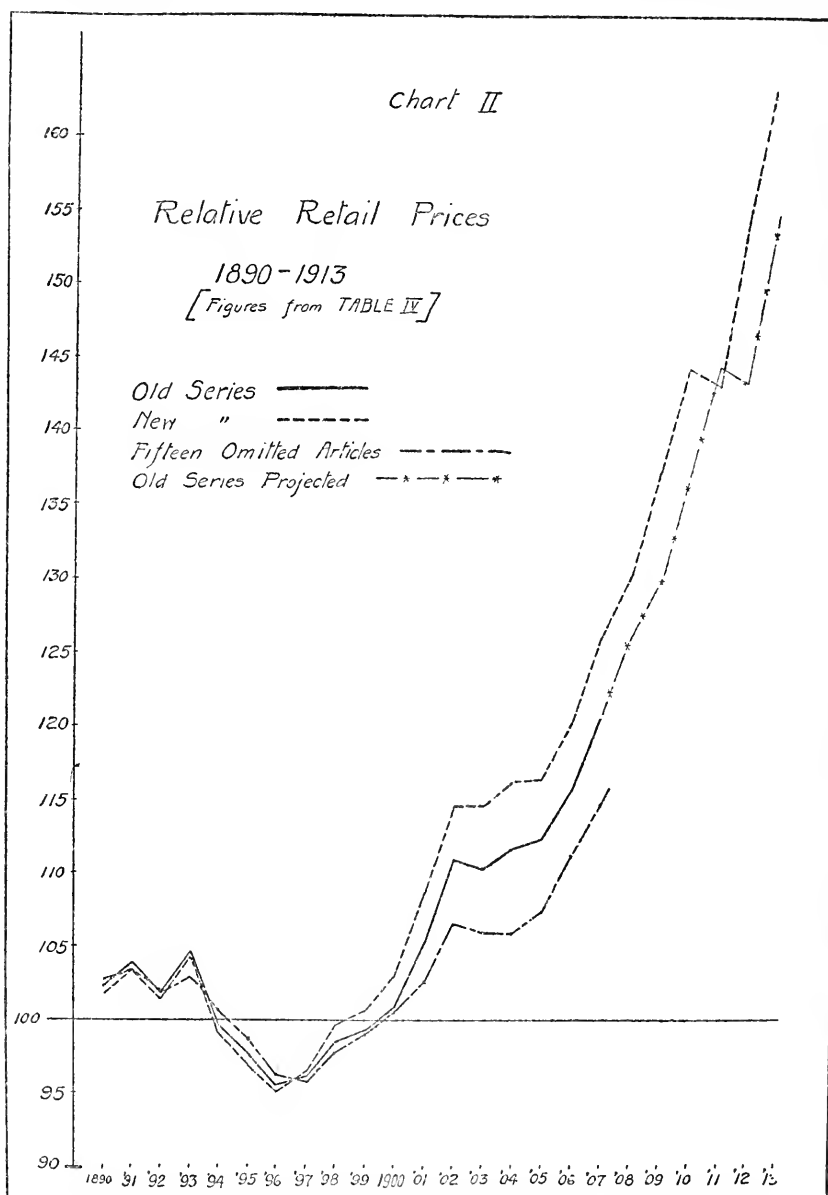


TABLE 4.—COMPARISON OF THE NEW SERIES, THE OLD SERIES, AND THE SERIES REPRESENTING THE OMITTED FIFTEEN ARTICLES.

Year	New series (15 articles)	Old series (30 articles)	Series covering the omitted 15 articles
1890	101.9	102.4	102.6
1891	103.4	103.8	103.4
1892	101.6	101.9	102.0
1893	104.1	104.4	103.1
1894	99.2	99.7	100.8
1895	97.1	97.8	98.8
1896	95.2	95.5	96.4
1897	96.7	96.3	95.9
1898	99.7	98.7	97.8
1899	100.8	99.5	99.3
1900	103.0	101.1	100.7
1901	108.5	105.2	102.7
1902	114.6	110.9	106.6
1903	114.7	110.3	105.9
1904	116.2	111.7	105.8
1905	116.4	112.4	107.4
1906	120.3	115.7	111.3
1907	125.9	120.6	114.7
1908	130.1		
1909	137.2		
1910	144.1		
1911	143.0		
1912	154.2		
1913	163.4		

15 omitted articles begins to fall below it, and at about the same rate. The evidence, therefore, would appear to be convincing that the "one-sided selection of articles" is responsible for the difference between the new and old series.

What, then, are we to say with regard to the representativeness of the new series? We have, on the one hand, the statement of the Bureau of Labor that "these fifteen articles (included in the new series) represent approximately two thirds of the expenditures for food by the average workingman's family." We know, on the other hand, that the information on which this statement was based was gathered in 1901, and in a population so changing in composition as is ours, it is at least a question whether the habits of living have remained relatively the same over this period of ten or more years. It would certainly be strange if the workman's diet remained unchanged when substitutes for the increasingly costly articles were to be had at prices that had not risen. But even waiving these matters, we should have to face the fact that materials representing one third of the food expenditures of

laborers were to be found on the list of "omitted articles." These considerations would seem to lead us almost inevitably to the conclusion that the new series is not an altogether accurate measure of the relative prices of the food consumed by laborers.

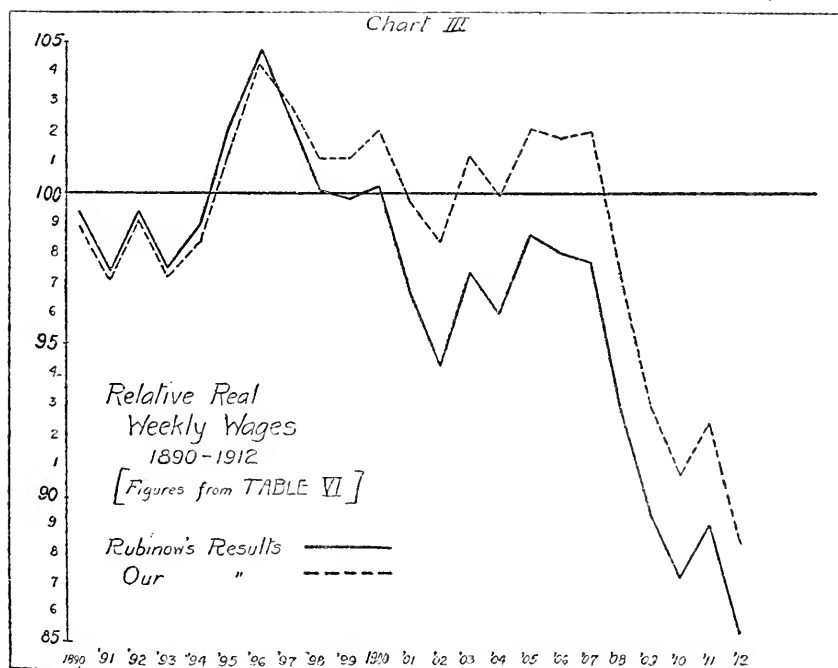
If this reasoning be just, it would seem that Dr. Rubinow's results, based as they are upon the newer and more radical series, exaggerate somewhat the gloom of the situation. To stop, however, with simply a criticism of Dr. Rubinow's results would accomplish little. Can we not go farther and construct from existing data a series which shall be somewhat more representative? I think this can be done. From 1890 to 1907 we have the old series computed by the Bureau of Labor which, in the light of the above discoveries, and also from the very fact that it represents 30 articles instead of 15, would seem more representative of the facts. But what of the years subsequent to 1907? Turning to Chart III we note that the series covering the omitted articles, after dropping well below both the others, by 1902 runs a course parallel to them as far as we have the data. What general in-

TABLE 5.—COMPUTATION OF RECENT REAL WAGE INDEX SERIES.

Year	Hours per week	Wages per hour	Full time weekly earnings per employee	Retail prices (old series)	Purchasing power of wages as measured by retail prices of food	
					Hourly wage	Weekly wage
1890	101.1	100.2	101.3	102.4	97.9	98.9
1891	100.9	99.9	100.8	103.8	96.2	97.1
1892	100.7	100.3	101.0	101.9	98.4	99.1
1893	100.4	101.2	101.6	104.4	96.9	97.3
1894	99.2	98.9	98.1	99.7	99.2	98.4
1895	99.8	98.6	99.2	97.8	100.8	101.4
1896	99.7	100.0	99.7	95.5	104.7	104.4
1897	99.5	99.6	99.1	96.3	103.4	102.9
1898	99.6	100.2	99.8	98.7	101.5	101.1
1899	99.2	101.4	100.6	99.5	101.9	101.1
1900	98.6	104.7	103.2	101.1	103.6	102.1
1901	98.1	107.0	105.0	105.2	101.7	99.8
1902	97.4	112.0	109.1	110.9	101.0	98.4
1903	96.7	115.5	111.7	110.3	104.7	101.3
1904	96.0	116.3	111.6	111.7	104.1	99.9
1905	96.0	119.6	114.8	112.4	106.4	102.1
1906	95.4	123.6	117.9	115.7	106.8	101.9
1907	95.1	129.3	123.0	120.6	107.2	102.0
1908	94.5	128.5	121.4	124.8	103.0	97.3
1909	94.4	129.9	122.6	131.9	98.5	92.9
1910	93.8	134.0	125.7	138.8	96.5	90.6
1911	93.3	136.3	127.2	137.7	99.0	92.4
1912	93.0	141.5	131.6	143.9	95.0	88.4

TABLE 6.—COMPARISON OF REVISED RESULTS WITH DR. RUBINOW'S.

Year	Hourly wage		Weekly wage	
	Rubinow's series	Revised series	Rubinow's series	Revised series
1890	98.3	97.9	99.4	98.9
1891	96.6	96.2	97.5	97.1
1892	98.7	98.4	99.4	99.1
1893	97.2	96.9	97.6	97.3
1894	99.7	99.2	98.9	98.4
1895	101.5	100.8	102.2	101.4
1896	105.0	104.7	104.7	104.4
1897	103.0	103.4	102.5	102.9
1898	100.5	101.5	100.1	101.1
1899	100.6	101.9	99.8	101.1
1900	101.6	103.6	100.2	102.1
1901	98.6	101.7	96.8	99.8
1902	97.7	101.0	94.3	98.1
1903	100.7	104.7	97.3	101.3
1904	100.0	104.1	96.0	99.9
1905	102.8	106.4	98.6	102.1
1906	102.7	106.8	98.0	101.9
1907	102.7	107.2	97.7	102.0
1908	98.8	103.0	93.0	97.3
1909	94.7	98.5	89.4	92.9
1910	93.0	96.5	87.2	90.6
1911	95.3	99.0	88.9	92.4
1912	91.8	95.0	85.3	88.4



formation we have regarding prices would lead us to think that coffee, tea, molasses, rice, prunes, salt beef or pork, etc., have not risen in price since 1907 as did sirloin, pork chops, or strictly fresh eggs, *i. e.*, that the omitted articles surely have not risen since 1907 at a greater rate than did the articles on the new list. If we are safe in making this guess—that omitted articles have not risen at a *greater* rate—we are afforded a convenient and, I think, not inaccurate method of estimating the course of the prices of the 30 articles. If the new series and the relative prices of the omitted articles are to continue their parallel course, the series representing the 30 articles must keep its intermediate position. So by continuing the curve representing the old series in a course parallel to that of the new series we should have a pretty close estimate of its true course. And, although this curve represents no actual data, I am inclined to believe that it is closer to the truth than the new series. By extending the curve on Chart II and using, in conjunction with Dr. Rubinow's wage series, the figures thus derived, it has been possible, in Table 5, to compute an index series representing real wages from 1890 to 1912. Table 6 and Chart III show the recent course of real weekly wages as computed by Dr. Rubinow and as I have computed them.¹³

It is evident that the results thus obtained do not present so gloomy a picture as Dr. Rubinow's. Nevertheless, it is quite clear that, even if we discard altogether the more radical new series and depend upon a more conservative series thus obtained, there is nothing in the facts—as far as these figures may be taken as representative of the facts—which can give the wage-worker cause for rejoicing, and that the doctrine so popular in certain quarters that while the rich have grown rapidly richer in recent years the poor have also steadily risen in the scale of economic welfare, has no foundation in fact.

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¹³ The real hourly wage of my results shows approximately the same divergences from Dr. Rubinow's figures as does the real weekly wage. Therefore the series have not been plotted.

OPEN PRICE ASSOCIATIONS¹

Legalized price maintenance has been extensively advocated among manufacturers for avoiding the evils of price cutting upon identified products by jobbers and retailers. Another widely different plan for stabilizing prices also of unidentified products among manufacturers themselves is being received with increasing favor. Although in a number of respects the motives are not the same, the chief difference between the two policies lies in the attitude toward future prices. Price maintenance proposes fixed prices for future transactions; the new so-called "open price" policy² proposes nothing with respect to prices except that they shall be made "intelligently." Each manufacturer fixes his own selling price as he sees fit and changes it when he so desires; but in fixing prices he should have the fullest and most accurate knowledge of market conditions, of what other firms in the same line are doing, in price, in tonnage, stocks, shipments, rebates, discounts, and the like.³ The underlying theory is that instability and disorganization of business are due chiefly to ignorance or misinformation as to actual market conditions and as to costs of manufactur-

¹The data upon open price associations upon which the following article is based have been secured from documentary material and from personal interviews and personal correspondence with officers and members of these organizations. A small amount of material may be secured from trade journals and other sources, to some of which reference is made below.

²The terms "open price," "open price policy," and "open price association" were first given prominence in the year 1912 in a book entitled *The New Competition*, by Arthur Jerome Eddy, a Chicago lawyer. The greater part of the work is occupied by a description of present-day competitive methods, but it also contains (chs. 9 and 10) a constructive plan for a type of association which was designed to eliminate some of the evils and wastes of competition. The book has been read by increasing numbers of business men, who generally credit Mr. Eddy with originating the plan. Mr. Eddy is at present legal counsel for a number of these organizations.

³Clark McKercher, in *Transactions of the National Association of Cotton Manufacturers*, No. 98, 1915, p. 178. Mr. Eddy defines the "open" prices as "a price that is open and aboveboard, that is known both to competitors and customers, that is marked wherever practicable in plain figures on every article produced, that is accurately printed in every price list issued—a price about which there is no secrecy, no evasions, no preferences. In contract work it means that every bid made and every modification thereof shall be known to every competitor for the order; it means that even the cunning and unscrupulous competitor may have this information." *The New Competition*, p. 110.

ing and marketing. Accurate knowledge upon these matters is declared to be a sufficient remedy.⁴

To provide this information most efficiently, coöperation among concerns engaged in the same line of business has been found necessary. Open price associations which adhere strictly to the policy aim simply to provide the machinery for the collection and dissemination of the desired knowledge concerning market conditions. They may be described as associations of competitors formed for the purpose of improving business conditions through the interchange of information and opinion as to prices and other factors relating to business transacted.⁵

Spread of Open Price Associations

The movement toward the formation of open price associations has taken hold in all parts of the United States and in widely different industries.⁶ In the textile branch, among the first to adopt the plan were about thirty-five of the important finishing firms (bleachers, dyers, and printers) who early in 1914 united to form the National Association of Finishers of Cotton Fabrics.⁷ Its success has stimulated the formation of similar associations among textile manufacturers, such as the Gingham Association, formed in the fall of 1915 by the leading gingham mills; and local associations of mill owners at Fall River and New Bedford, Massachusetts.⁸ Knit goods manufacturers have recently united and the matter has been actively agitated among white goods bleacheries, silk goods manufacturers, and among mill owners in Southern cotton centers.⁹ Interest in textile circles became so active that

⁴ "Knowledge regarding bids and prices actually made is all that is necessary to keep prices at reasonably stable and normal levels." *Ibid.*, p. 121.

⁵ In the following, the term "open price association" will be applied to all organizations of competitors which have adopted more or less fully open price methods.

⁶ Estimates as to the numbers of open price associations in operation vary so widely—from twenty to "hundreds"—as to be practically worthless. It seems that the lower estimate is somewhat too conservative. It is true that the number of associations which have adopted the plan in its entirety is not large, and of these but few are of national importance. Cf. *New York Journal of Commerce and Commercial Bulletin*, Nov. 12, 1915.

⁷ This association was organized in close conformity with the plan proposed by Mr. Eddy, who has been its counsel since organization.

⁸ Cf. *Journal of Commerce*, Oct. 30, 1915; Feb. 29, 1916; Apr. 3, 1916; May 27, 1916.

⁹ *Ibid.*, Jan. 4, 1916.

the largest trade organization, the National Association of Cotton Manufacturers, took up the study of open price methods.¹⁰ As a result of this investigation, a project is now under consideration for a reorganization of the National Association which will involve an extension of its activities so as to include a bureau for the interchange of market and price information and opinion which is the essence of open price policy. Among manufacturers of woollens and worsteds agitation extending over many months bore fruit in the formation of the Woolen Goods Exchange. Though at present including only fourteen firms, some of these are the largest in the United States.¹¹ The Woolen Goods Exchange was organized under the auspices of the National Association of Wool Manufacturers, the secretary-treasurer of that trade organization being also the secretary of the exchange.

In the lumber industry, the adoption of open price methods is being pushed. The Southern Pine Association, the successor to the Southern Pine Manufacturers Association, declared illegal by a Missouri supreme court decision, is considering an extension of its work so as to place it upon an open price basis.¹² Another trade organization, the Western Pine Manufacturers, has a department known as the Information Bureau which has carried on open price work since 1912. Affiliation with this particular de-

¹⁰ Cf. *ibid.*, Nov. 11, 12 and 15, 1915; Oct. 30, 1915; and especially Jan. 4, 1916. Also *Transactions of the National Association of Cotton Manufacturers*, No. 98, 1915, pp. 176 *et seq.*

¹¹ The American Woolen Company and the Cleveland Worsted Mills Company are among the members. There are several other exchanges operating along lines similar to the Woolen Goods Exchange. Among them are: Pipe Fittings and Valve Exchange, Brass and Copper Statistical Exchange, Range Boiler Exchange, Fine Cotton Goods Exchange, Tubular Plumbing Goods Exchange, Meter Manufacturers' Exchange, National Gas Appliance Manufacturers' Exchange, Rubber Association, Druggist Sundries Division.

¹² One of the recent recommendations of the board of directors of the Southern Pine Association was that the association create a committee of sales to consist of twenty-five members and to have a permanent salaried secretary to gather information as to actual sales and selling prices, this information to be published in the association's weekly bulletin. The recommendation suggested that members pledge themselves to make daily reports to the secretary of the committee showing an accurate abstract of actual sales, specifying quantities, prices, grades, and rates of freight. *Southern Lumberman*, Feb. 10, 1917, p. 27; *American Lumberman*, Feb. 10, 1917, p. 420. Cf. also report of Committee in Accounting and Statistics, *Southern Lumberman*, Feb. 17, 1917, p. 27. For purposes of association, cf. *American Lumberman*, Dec. 5, 1914, p. 40.

partment is open only to members of the trade association, but is optional with them; nevertheless, practically all of the larger mills and many of the smaller have joined. The most notable example of open price associations among lumber manufacturers is furnished by the Hardwood Manufacturers Association of America.¹³ Originally merely a trade association, it has recently adopted the open price plan in its entirety and began operating under it March 1, 1917. It is intended that eventually all hardwoods shall be included, but in the beginning its operation is to be confined to oak, the lumber most commonly produced by members.¹⁴

In the steel, iron, and hardware business, one of the oldest open price associations and one which has received considerable publicity is the Bridge Builders' and Structural Society,¹⁵ embracing many of the large iron and steel interests not identified with the Steel Corporation. It has been in successful operation since May, 1911, and at the outset included twenty-five firms. Another open price organization, the Associated Metal Lath Manufacturers, consists of eight firms representing about ninety per cent of the metal lath production of the country. Manufacturers of tacks are organized to carry out open price methods in the National Association of Tack Manufacturers. The Pressed Metal Association comprises twelve of the largest firms manufacturing metal stampings. The National Association of Sheet and Tin Plate Manufacturers, the Manganese Steel Founders Society, and the National

¹³ Cf. Draft of Proposed Plan for Establishing Open Competition among Hardwood Manufacturers. Prepared by a Committee Appointed by the Board of Governors of the Hardwood Manufacturers Association on Dec. 15, 1916. Approved by the Board of Governors, Jan. 29, 1917. (Reprinted in *American Lumberman*, Feb. 3, 1917, pp. 42-43; see also *Southern Lumberman*, Feb. 3, 1917, pp. 23 *et seq.*)

¹⁴ The Gum Lumber Manufacturers Association issues a series of sales reports upon the basis of reports made by members, an approach toward open price methods. *Southern Lumberman*, Jan. 27, 1917, p. 34; *St. Louis Lumberman*, Feb. 1, 1917, p. 68.

The West Coast Lumbermen's Association added during 1916 a statistical bureau which issues information upon trade conditions based upon reports received currently from about 125 members. *American Lumberman*, Feb. 3, 1917, p. 40.

The Oak Manufacturers Association is also considering a reporting plan. *St. Louis Lumberman*, Feb. 1, 1917.

¹⁵ Upon the Bridge Builders' and Structural Society, cf. *Journal of Commerce*, Nov. 11, 1915. Also testimony of John Sterling Dean, in the case *United States v. the U. S. Steel Corporation and others*. District Court of U. S., New Jersey district. Transcript of record, vol. II, pp. 797 *et seq.*

Association of Brass Manufacturers may be added to the list of associations which have adopted the open price plan.

In the leather trade, the National Association of Tanners is urging the formation of open price associations among its members. At present, only one of the sub-groups, the upper leather group, is operating under the plan, but it is expected that other groups of leather manufacturers will follow shortly.¹⁶ The Cut Sole Manufacturers Association has been in existence for about six years. Following unsuccessful attempts to fix prices in 1909 and 1910, the Leather Belting Exchange¹⁷ was started in August, 1915, as an open price organization with a membership which has subsequently grown to include thirty-eight concerns engaged in leather belting manufacture and representing about 65 per cent of the total production of the United States.

A number of territorial associations employing open price methods are said to exist in the milling industry.¹⁸ Among asbestos manufacturers, the Asbestos Textile Manufacturers Association, the Asbestos Brake Lining Association, and the Asbestos Paper Manufacturers Association have adopted a modified plan for reporting actual sales, prices, and stocks. Many members of the American Faced Brick Association have united to carry out in part the open price methods through the central office of the trade organization.¹⁹ Michigan salt producers have adopted the open price form of coöperation in the Salt Producers Association; so also the manufacturers of optical goods.²⁰ It is unnecessary to proceed further with the enumeration. It is sufficiently clear that the importance of some and the wide variety of industries affected render this type of organization deserving of detailed study.²¹

¹⁶ *E.g.*, the heavy leather, fancy leather, and the upholstery leather groups.

¹⁷ For information upon the Leather Belting Exchange, consult printed copies of two speeches held at the Babson Conferences on Coöperative Competition, one by the secretary of the Exchange, Louis W. Army, Sept., 1915, the other by Mr. W. V. Spaulding, Sept., 1916.

¹⁸ Of the half dozen millers associations said to be operating upon an open price basis, specific information could be secured concerning only the Ohio Millers State Association.

¹⁹ *Cf.* in this connection the speech of Mr. J. Parker D. Fiske before meeting of New England Builders Supply Association, Feb. 20, 1917. Outlined in the Annual Official Program, pp. 84 *et seq.*

²⁰ The Optical Manufacturers Association adopted the open price plan in June, 1916. Thirteen firms located in Massachusetts, Rhode Island, New York, Pennsylvania, New Jersey, and Michigan are at present included in the membership.

²¹ To the open price associations mentioned above, may be added the National

Organization and Operation of Price Associations

Origin. The associations of competing firms through which the open price plan is put into operation may be organized specifically for that purpose, as some of the textile associations.²² The larger number of associations are developments of trade organizations, which either have been fully converted into open price associations, or have established departments for the interchange of information as to prices obtained in actual sales, stocks, etc., and encourage their members to participate in the work.²³ Often information is cleared through the office of the secretary of the trade association, but in other cases special secretaries and agencies are employed.

Objects. The ultimate purpose of every open price association is to effect greater stability and increased profit in the business of its members through coöperation along certain lines. The immediate object as declared in the articles of association is usually to provide means whereby the final result is to be accomplished. Provision for the collection and distribution of information is essential. To quote from the plan of the Hardwood Manufacturers Association,²⁴ the purpose is: "To disseminate among members accurate knowledge of production and marketing, so that each member may gauge the market intelligently instead of guessing at it; to make competition open and aboveboard instead of secret and concealed; to substitute in estimating market conditions frank and full statements of our competitors for the frequently colored and misleading statements of the buyer." More specifically stated is the fifth object of the Bridge Builders' Society "to establish frankness regarding bids, terms, and prices actually made."²⁵ Although in some cases, the objects are stated in very general terms,²⁶ the

Association of Stationers and Manufacturers and the Tobacco Merchants Association; others are said to be in operation among manufacturers of rigid electrical conduits, powder, beet sugar, and knives. A portion of the membership of the National Association of Steel Furniture Manufacturers is also operating under the open price plan.

²² *E.g.*, National Association of Finishers of Cotton Fabrics, local associations at New Bedford and Fall River. The Pressed Metal Association and the Leather Belting Exchange are also examples.

²³ *E.g.*, the National Association of Tanners, Western Pine Manufacturers Association, Hardwood Manufacturers Association.

²⁴ *American Lumberman*, Feb. 3, 1917, p. 42.

²⁵ *United States v. U. S. Steel Corporation et al.* Transcript of Record, vol. II, p. 807.

²⁶ For instance, the object of the Cut Sole Manufacturers Association is "to promote social intercourse and general prosperity of those engaged in the cut sole business." By-laws, art. I.

larger associations specify with considerable detail what they intend to do. In addition to the main purpose of providing machinery for the exchange of information, bringing about standardization of product and facilitating the adoption of a uniform cost accounting system are often mentioned. Both are desirable for the effective operation of open price methods. The objects of the Cotton Finishers Association²⁷ include others also; but only three of

²⁷ Article II of the Constitution of the National Association of Finishers of Cotton Fabrics reads:

"The objects of the association are as follows:

"A. To promote publicity in the transaction of business, and to promote cordial and friendly relations among members, by means of monthly and other stated meetings, thereby removing, so far as possible, misunderstandings and ill feelings due to the spreading of false reports and baseless charges, and to ignorance of conditions prevailing in the industry.

"B. To collect and disseminate accurate information relating to the finishing of cotton fabrics, to the end that each finisher, however small his output, may be placed, in so far as data for the intelligent conduct of his business goes, on a footing of equality with other finishers.

"C. To coöperate with customers in the maintaining of high standards in the manufacturing and finishing of cotton fabrics.

"D. To devise a scientific system of cost accounting, to the end that every one engaged in the industry may accurately know the cost of his output. In this connection, it is not the purpose of the Association to impose upon any member any cost items or to use in any manner the cost system as a means for controlling prices. The sole object is to secure, if possible, the adoption of a scientific system of cost accounting, without in any manner seeking to have disclosed the actual costs of a member. In this connection the Association is in hearty accord with legislation now pending in Congress looking toward the adoption of uniform scientific cost systems.

"E. To take up and carefully consider sanitary, hygienic and safety measures and appliances and, in this connection, the insurance and pensioning of employes and the welfare of employes generally, and to coöperate with legislative and other public bodies in the framing of laws along these lines.

"F. The bringing out into the open of all competitive conditions and the introduction of the open price policy, to the end that whatever price information is distributed to producers and consumers, it will be absolutely accurate.

"IMPORTANT: There are no penalties of any kind or character connected with the operation of the Association. Members may or may not file information called for by the Reporting Plan hereafter set forth; if they do not file they get no information; if they do file, they get like information in return.

"There is nothing secret about either the meetings or the operations of the Association. All its proceedings are reduced to writing and carefully kept in the minutes. Customers may attend meetings and become familiar with the operations of the organization. Members are free to invite competitors, who are not members, to attend meetings of the Association.

"Nothing in the plan or operation of the Association shall be understood or

them are closely connected with the open price plan: (a) to promote publicity in the transaction of business, (b) to devise a scientific system of cost accounting, (c) to introduce the open price policy. Other purposes are not peculiar to open price associations and may be attempted by organizations having nothing to do with costs or prices.

Membership. The membership of open price associations may include firms located in all parts of the country.²⁸ More often members are drawn from a smaller area, a large section,²⁹ or a single state,³⁰ while some associations are confined to firms in a small locality.³¹ Nevertheless, for successful operation it is important that territory be sufficiently limited to permit ready exchange of information and meetings of members at frequent intervals. As a consequence, associations whose membership covers a wide area have found it advisable to divide into smaller sections.³² Also, where there is much specialization among members of a large organization, sub-grouping of members may be made upon a product basis, as in the case of the Tanners Association.

Membership in open price associations is ordinarily open to any firm, corporation, or individual in good standing engaged in the particular line of business in the territory covered, which will agree to comply with the provisions of the constitution and by-laws and other rules of the organization, and to pay the required dues and fees. Where trade associations have taken up the work, membership in these is usually a prerequisite for participation in the open price plan;³³ but membership in the former is in most construed as directly or indirectly restraining the freedom of any member to at all times quote such prices and terms as he pleases, each member being as free to compete for business as he would be if the Association did not exist."

²⁸ *E.g.*, Hardwood Manufacturers Association of America, National Association of Finishers of Cotton Fabrics, Leather Belting Exchange.

²⁹ *E.g.*, Bridge Builders' and Structural Society, Pressed Metal Association, Optical Manufacturers Association.

³⁰ *E.g.*, Ohio Millers State Association.

³¹ Local associations at Fall River and New Bedford, Mass.

³² The Leather Belting Exchange divides its members into Eastern and Western groups. Spaulding, p. 5.

The members of the American Faced Brick Association participating in the open price plan are subdivided upon what is nominally a product basis, *i.e.*, according to varieties of brick, but for practical purposes is also roughly geographical, because of the difference in the varieties produced by different sections.

³³ *E.g.*, Western Pine Manufacturers Association, Hardwood Manufacturers Association.

cases unrestricted. Application to the secretary, agreement to abide by the constitution and by-laws, and the payment of dues satisfy the requirements for admission to membership in the Ohio Millers State Association.³⁴ Unanimous election is required for entrance into the American Tack Manufacturers Association.³⁵ To become a member of the Cotton Finishers Association, a concern engaged in the trade must be proposed for membership by a member, be approved by a majority of the executive committee, and be elected by a majority of members.³⁶ Since it is to the advantage of open price associations to have as complete a membership as possible, restrictions upon membership are practically non-existent. To defray the expenses, certain associations require the payment of an initiation fee in addition to periodical dues.³⁷ Others confine their financial requirements to annual dues and assessments which vary in amount according to the scope of association activity. The initiation fees are fixed in amount, but the annual dues are often graded according to the capacity of members.³⁸

Members pledge themselves to give certain information regarding their business to the central office and have the right to receive information so long as they live up to their part of the agreement. No penalties are imposed for failure to make reports except the withholding of information reported by other members. Outside of the agreement to give information and to pay dues, no obligations are imposed upon the members of an open price association.

³⁴ Constitution, Ohio Millers State Association, art. II, sec. 1. Section 2 provides that firms or corporations other than those engaged in manufacture of flour or meal may become associate members, having all privileges of regular members except voting. This is unusual.

³⁵ Articles of American Association of Tack Manufacturers, art. I.

³⁶ Constitution, National Association of Finishers of Cotton Fabrics, art. IV, sec. 1.

³⁷ For instance, the initiation fee required by the Pressed Metal Association is \$50.

³⁸ The annual dues of the members of the Pressed Metal Association are based upon the volume of sales of metal stampings and range from \$200 to \$1,000 a year. The American Tack Manufacturers Association levies dues of 5 cents per 100 lbs. The Ohio Millers State Association has a graded list of annual dues according to the daily mill capacity, from \$10 for mills of less than 60 bbls., \$15 for 100-200 bbl. mills, and higher for larger capacity. (Constitution, art. IV, sec. 1.)

The Cut Sole Manufacturers Association requires a fixed annual payment of \$70 (By-laws, art. 5). In the National Association of Sheet and Tin Plate Manufacturers, the dues vary from \$100 to \$200 per hot mill per year.

Meetings. Frequent meetings are an important feature in the operation of successful open price. Many of the associations hold monthly sessions,³⁹ others at greater intervals.⁴⁰ At these meetings, general business conditions and other topics are considered, but it is to discussion of prices that greatest interest attaches. Upon the basis of information which has come through the operation of the reporting system, members ask and answer questions as to the details of past transactions, reasons for quoting prices, methods of figuring costs and the like. There is, of course, great danger that the discussion may consciously or unconsciously shift to future prices unless the members have been duly impressed with the importance of guarding against express or implied reference to future prices. Many associations have adopted a policy of having competent counsel present at every meeting to keep the discussion clearly within legal limits and to pass upon the legality of any action. Some associations also make a practice of filing minutes of meetings with the Federal Trade Commission; or at least leaving them open to inspection by authorities.

Officers. The officers of open price associations are the usual officers of formal organizations, such as president, vice-president, secretary and treasurer, with a board of directors or an executive committee, and occasionally both.⁴¹ The attorney or counsel is classed as an officer in the American Tack Manufacturers Association.⁴² With the exception of the secretary and attorney, the officers are members of the association, serving usually without compensation. The duties of the president, vice-president, and

³⁹ The following hold monthly meetings: "Asbestos Textile Manufacturers Association, Cotton Finishers Association, Bridge Builders' and Structural Society. Meetings of the Pressed Metal Association are held monthly in different cities covering the territory from Detroit to Boston in a year. The Leather Belting Exchange members meet monthly in two groups. The meeting of the Western Group is held in Chicago; this is reheld in New York a week later. Every three months a joint meeting is held alternately at Chicago and New York.

⁴⁰ The Cut Sole Manufacturers Association holds eight regular meetings per year. In the American Tack Association, regular meetings are called by the secretary, ten days' notice being given to members.

⁴¹ Officers of the Pressed Metal Association are president, vice-president, secretary and treasurer. The last two are held by an acting commissioner. There is also an executive board. Cotton Finishers Association: president, vice-president, secretary, treasurer and executive committee; American Tack Association: president, vice-president, secretary, treasurer, attorney, executive committee.

⁴² Agreement, American Tack Manufacturers Association, sec. 8.

treasurer are not different from those pertaining to such offices. On the other hand, the secretary is more often than not a paid official, not a member of the association. The duties of the secretary, when he has charge of the clearing of information will be described below in connection with the discussion of the reporting plan.

The Central Office. A central office where reports are received from members of the association and from which information based thereon is distributed is necessary for the operation of an open price association. Three methods of providing this may be distinguished. Certain associations such as the Bridge Builders' Society, Cotton Finishers' Association, and the Leather Belting Exchange have their own central offices in charge of salaried secretaries.⁴³ Under the second, the open price associations may exchange information through the secretary of the trade organization where in some cases special bureaus or departments have been provided for the work. A third method is that of several organizations reporting to a single office not connected with any one of them.⁴⁴ This office may be in charge of an impartial individual or firm which undertakes to combine the work of several associations, no one of which is willing to maintain a separate office.

The Reporting Plan. The reporting plan is the essential feature of any open price association. It is in this that associations differ most widely; and it is the character of the reporting plan which indicates how far open price methods have been adopted by any association. The reporting plan must, of course, be adapted to the nature and volume of each business and to the extent to which members are able and willing to coöperate in furnishing information to be passed on to competing concerns. Two general types of reporting plans may be distinguished. The first is that employed in contract work, adapted to businesses in which it is customary to ask for and receive bids upon specific pieces of work, no two sets of specifications being alike. The plan of the Bridge Builders' and Structural Society well illustrates this type.⁴⁵ Each

⁴³ The open price work of the Pressed Metal Association is in the hands of a Boston firm of certified public accountants and industrial engineers, a representative of which has charge of the association office.

⁴⁴ The National Association of Brass Manufacturers combines with others in clearing through a Chicago office. The Associated Metal Lath Manufacturers operates through the Armstrong Bureau of Related Industries (Chicago).

⁴⁵ Cf. *United States v. U. S. Steel Corporation*. Transcript of Record, vol. II, pp. 797 *et seq.* Also *New York Journal of Commerce*, Nov. 11, 1915. References to reports are made in the *Iron Age*, July 18, 1912; Jan. 20, 1916. Of

member of the society pledges himself to make reports to the central office. When a bid for a certain piece of work is made by any member, a copy is sent at once to the central office in charge of a paid secretary. These bids may be sent in open or sealed. If the bids are open, the information in the reports is exchanged at once between all competitors bidding upon the same contracts. If firms *A*, *B*, *C*, and *D* have made bids upon the structural ironwork of a New York office building, they send their reports to the secretary unsealed. The information is immediately interchanged, so that each firm knows what the others have bid. The firms that do not make bids get none of this information. But if the firm *D* sends in its bid sealed, the information as to its bid is withheld from the other bidders until after the contract is closed. Likewise information as to the other bids is withheld from *D*. The practice of making sealed bids was used quite frequently by members during the early stages of the organization, but the members of the structural society soon gave it up as unnecessary. After putting in one bid, any firm is free to revise its bid after seeing the others, as radically and as often as it pleases. Nevertheless, the practice of revising so late as to prevent others from doing likewise is discouraged. Upon the basis of these daily reports of contracts and bids and other information secured from members, the secretary compiles statistics as to the totals of contracts, tonnage and relation to capacity, in addition to the frequent reports upon sales and contracts.⁴⁶

interest is also a reference to the method of submitting bids, *Iron Age*, July 1, 1915, p. 57. Upon reporting plans in general, cf. Eddy, pp. 122 *et seq.*

⁴⁶ The reporting plan of the National Association of Finishers of Cotton Fabrics is similar because the work is usually done on contract. At the beginning each member sent in prices then in existence with names of customers, terms, and conditions. Each member reports daily as soon as made every quotation, verbal or written, giving the name of the customer, description of work, quantity, terms, discounts, and all inducements, direct and indirect, offered to secure the order or contract. Each week each member files with the secretary, on a specially prepared blank, statistical information as to the quantity of orders, in pounds or yards, and the number of days' work ahead. This information is classified by the secretary, who makes daily and weekly reports to the members, sending to each member, however, only that information which concerns the branch of the finishing trade in which he is engaged, unless specially requested to do otherwise. An exception to the general procedure is made "whenever the bidder pursues a policy followed by the government and other public bodies of asking for bids to be submitted at a given date and opened at a given hour," in which case the Finishers Association will interchange no information until after the date and hour fixed by the customer.

The procedure is much the same in the Pressed Metal Association.⁴⁷ When in response to the requests of a manufacturer a member of the association makes a quotation upon the basis of costs, including a certain rate per thousand for the stamping and an initial charge to apply on the cost for manufacturing the dies and tools necessary to produce the part, a copy of the quotation, which is usually in the form of a letter, is forwarded to the com-

⁴⁷ The following are typical forms used by members of certain open price associations for reporting bids made and contracts awarded. A third form is also given for a secretary's report of quotations.

REPORT OF BID TO COMMISSIONER
XYZ ASSOCIATION

FOR INTERCHANGE AMONG MEMBERS REPORTING BIDS ON JOB SHOWN BELOW

..... 19....

John Smith, Commissioner

Dear Sir:

We herewith report our.....bid, submitted

(ORIGINAL OR REVISED)

on..... 19...., (our submission No.....)

(DATE BID SUBMITTED)

to..... for.....

(TO WHOM SUBMITTED) (NAME OF CUSTOMER)

on..... at.....

(NAME OF JOB) (LOCATION OF JOB)

in the amount of \$.....

(AMOUNT OF BID)

for furnishing.....

(GENERAL NATURE OF EQUIPMENT)

as per plans and specifications of.....

consisting of.....elevations of special work, Nos.....

and.....elevations of stock work, Nos.....

Bids on above job are to be opened on..... 19....

Remarks:

(IF BID IS ONLY ON PART OF CONTRACT, OR THERE ARE ANY OTHER
QUALIFYING CONDITIONS, PLEASE SO STATE.)

.....

You are authorized to interchange copies of the foregoing among all mem-
bers of the XYZ Association reporting to you a bid upon the above named job.

.....

NOTICE: We have also submitted the following alternate bid on the above
named job, as per plans of.....

consisting of.....elevations of special work, Nos.....

and.....elevations of stock work, Nos.....

in the amount of \$....., copies of which you are
authorized to interchange only among those likewise reporting alternate bids,

Yours very truly,

.....

By.....

Date received by commissioner.

.....

Job No.....

missioner's office, where all bids are arranged in a file according to names of prospective customers. If no other members quote the same prospective customers upon the same parts within two months, it is assumed that no competitive quotation was made. As soon as the records show that two members have quoted on the same parts, a report is made out on the form provided for the purpose, showing the names of members quoting, part number quoted on, rate per thousand for parts, and the charge for tools. A copy of this report is mailed to both the members quoting, but is not mailed to other members. If a third or fourth or fifth quotation is received, new quotations are added to the report already made out, and a new report is mailed to all members quoting on that part. If one of the members secures the order, he so notifies the commissioner's office. At the regular monthly meeting of the association a statistical report is read showing the number of quotations which have been reported, the number which are competitive, and the number which have been closed.

REPORT OF CONTRACT AWARDED
XYZ ASSOCIATION

FOR INTERCHANGE AMONG MEMBERS REPORTING BIDS ON JOB SHOWN BELOW

John Smith, Commissioner

On the.....day of....., 19.....,
we closed the following contract, covering our bid reported to you under date
of....., 19....., our submission No.....:
Name of contractee or customer.....
Location of job.....
General nature of equipment.....
As per plans and specifications of.....
Consisting of.....elevations of special work, Nos.....
And.....elevations of stock work Nos.....
Net selling price \$.....
Terms of payment.....
Time delivery to be made.....
Allowances given, or other qualifying conditions.....

You are authorized to furnish duplicate copies of the foregoing to all mem-
bers of the XYZ Association who reported bids to you on the above named job.

By.....

Date received by commissioner.

Job No.....

The second type of reporting plan is that used in businesses in which goods are sold to jobbers and retailers and in which transactions are closed currently for quantities of goods which may be more or less closely graded and standardized. Great differences exist between associations with respect to the amount of detail and the frequency of reports by members to the central office. In the most extreme form, all particulars as to the day's business would be forwarded daily to the central office by each member. The recently adopted plan of the Hardwood Manufacturers Association approaches this very closely.⁴⁸ A sales report must be made

A.B.C. ASSOCIATION

SECRETARY'S REPORT OF QUOTATIONS

Buyer X Automobile Co.

Date 3/20/17

Article	Quantity	Member 1	Member 2	Member 3	Closed by
		3/16	3/18	3/20	
Part S63	50,000	23.20/M \$875.T	23.00/M \$600.T	23.40/M \$700.T	Member No. 2 at price quoted.

REMARKS

Member 1—Delivery 4 to 8 weeks
Material O. H. H. R. Steel 1/4"
Member 2—Delivery 8 to 12 weeks
Material ditto
Member 3—Delivery 4 to 8 weeks
Material ditto

T—Tool Charge

S—Service Charge

D—Delivery

⁴⁸ In the plan of the Hardwood Manufacturers Association, which went into operation March 1, 1917, six different reports are to be made by the members: production reports, sales reports, shipping reports, stock reports, price-lists and inspection reports. The production reports are monthly reports made by each member of the grades and thicknesses, classified according to a scheme adopted at the time the open price plan was put into operation. These reports are summarized by the secretary and mailed to the members within fifteen days of the close of each calendar month. Shipping reports are to be made daily with the sales reports and include copies of invoices, special agreements as to terms, grade, etc. Each member reports monthly through the secretary the amount of stock of each grade, kind, and thickness on hand the first of the month. Totals are reported by the secretary to the members. Price-lists are to be filed by each member at the beginning of each month at the same time as the filing of the stock reports. Prices are to be made f. o. b. shipping point. Every change in price must be filed with the association currently as soon as made. It is not compulsory for any member to follow the price-list or the

daily by each member to show all sales and cancellations made that day whether any business has been transacted or not. They are to be exact copies of orders taken and to include all sales, large or small, to include all special agreements of every kind with reference to price, grade, or terms, whether the agreement is written or verbal. The secretary's report to members upon sales, which is weekly, divides customers into two classes. Class A includes all wholesalers, retail yards, and all others who resell except exporters, and may include others by consent of members; the names of these sellers and of customers and prices are shown. Class B includes all consumers who do not resell the stock as lumber, and also exporters; but in reporting these sales, name of customer and place shipped are not to be shown on the secretary's reports.

The reluctance of members to furnish competitors with detailed information, the lack of adequate financial support, and the amount of labor involved in handling reports are responsible for the fact that most so-called open price associations do not carry out the open price plan fully. The divergence from complete open price methods may be small and unimportant or may be so great as to give rise to the question as to whether a particular organization should be classed among open price associations or not. In the reporting scheme of the Leather Belting Exchange which furnishes an example of the former, copies of all invoices are sent by members to the central office; but only those above sixty dollars are listed in the secretary's report to members.⁴⁹ It is said that thereby ninety per cent of the invoices are eliminated and the resulting reports are not materially affected as indicia of market conditions.

changes which he reports to the association. Upon the basis of these price-lists the secretary reports to the members within the first ten days of each month a summary of prices asked by members, and any changes are reported currently to all members by the secretary. Inspection reports are special reports established for the purpose of checking up grades of lumber which have been fixed by the committee as a basis for operating under the open price plan. The purpose is to furnish each member a basis upon which he can compare his prices with other members, thereby making the price reports more intelligible and accurate.

⁴⁹ W. V. Spaulding, *Experiences in Coöperative Competition*, pp. 6, 7. The National Association of Brass Manufacturers has a somewhat similar plan. Copies of all invoices are sent daily by members to the commissioner. The report of the latter upon the basis of information received gives the size, quantity, and kind of goods sold, the city in which the sales were made, and the prices at which the goods were sold. Customers' names do not appear while sellers' names are given in cipher, a key to which is furnished to members.

These give a transcript of data including length, width, thickness, weight discounts, and price of belting sold, but the buyer's name does not appear and the seller's name is designated by a code number known to the secretary only. If any member wishes more specific information concerning a transaction, he may secure it by application to the secretary who, without revealing names, corresponds with the seller. To give another instance, all members affiliated with the Information Bureau of the Western Pine Manufacturers' Association send in each day an exact copy of orders taken. In the office of the secretary these are compiled into a daily report which contains all the information regarding orders except the name of the customer and the town in which he is located.⁵⁰

Other associations illustrate more pronounced variations from the details of the plan of organization as outlined by Mr. Eddy. Members of the Optical Manufacturers Association, having initially filed lists of prices, notify the secretary immediately of any change, and also submit weekly reports as to the amount of business transacted, from which the secretary's monthly summaries of business are compiled. The Ohio Millers State Association requires only a weekly report of selling prices of flour and mill products, buying prices of wheat, and information as to stocks of wheat and flour, all of which is combined with comments among general conditions and reported to members. The monthly reports of the Asbestos Textile Manufacturers' Association give detailed statistics as to the amounts of sales, stocks, orders filled, orders unfilled, high, low and average prices both for orders and sales. Individual transactions are not reported.

The Associated Metal Lath Manufacturers furnishes an interesting as well as a highly unusual example of an association which has attempted to carry the open price methods into the reselling of its products by jobbers and representatives. Members notify the central office of any changes in prices from lists previously filed as applying to distributors; such changes are immediately reported to other members. In order to secure current reports upon the fluctuating prices in the larger cities between jobber, dealer, and consumer, local associations have been organized in important centers, which comprise branch houses, repre-

⁵⁰ That is, the state in which the sales are made, rate of freight from shipping point, name of selling firm, and each item with the amount and delivered price as well as the price f. o. b. mill.

sentatives and jobbers directly representing the manufacturer. These local organizations exchange information through their local directors office—all prices which they quote as well as a weekly sales report which gives all details of sales except the buyer's name. The local reports are dispatched to the office of the Associated Metal Lath Manufacturers and forwarded promptly to each member.⁵¹

Legal Status of Open Price Associations

The legal status of open price associations operating along lines proposed by Mr. Eddy has as yet not been definitely determined by pronouncement of the courts or legislative enactment. Proponents of the plan declare that open price methods are in full conformity with both federal and state laws. It is said that a number of associations have submitted their constitutions and by-laws to the Department of Justice and to the Federal Trade Commission; some have gone so far as to file minutes of meetings with the latter body. In every case, however, the attitude of officials has been strictly non-committal neither affirming nor denying the legality of open price organization. Opinions as to the status must therefore be derived from a composite study of the legality of the essential features and operation of open price associations. The only case in which a good example of such organization has been brought before the courts was incidentally in the suit to dissolve the Steel Corporation when testimony was taken upon the Bridge Builders' and Structural Society. In the final opinion nothing was said specifically concerning that association but in speaking of the "Gary dinners" certain statements were made which seem to have a direct bearing upon open price methods.

The legal propriety of associations of competitors for certain purposes is unquestioned. Trade associations being nothing more than individuals, firms, or corporations engaged in a particular line of trade and acting under some kind of a formal organization are not obnoxious to law.⁵² The purposes for which associations may legitimately be formed are numerous, including social intercourse, protection against insolvent debtors, publication of statis-

⁵¹ Cf. program New England Builders' Supply Association, Feb. 20, 1917, p. 43.

⁵² *Trust Laws and Unfair Competition*, Report of the Commissioner of Corporations, dated March 15, 1915, p. 714.

tical data, etc. The exchange of information as to actual sales and prices received or quoted appears to be a legal purpose for an association provided such statistics truthfully represent current prices based upon actual sales or offers to sell or buy. But as has been stated in one case, if prices are misrepresented with a view to boosting the prices of any items, such action will be condemned by the courts.⁵³

There seems to be no legal objection to coöperation of competing concerns in the introduction of a uniform cost accounting system. The Federal Trade Commission recommends the extension of cost accounting and is willing to lend its aid in devising a suitable uniform system. But the adoption of uniform cost accounting and the exchange of information with regard to costs may be used as a means of fixing prices by indirection, perhaps in accordance with the highest costs as was the case with some of the farm machinery trade associations.⁵⁴ This is an abuse of the discussion of costs and not a fundamental objection to the open price plan.

Meetings of competing firms to discuss business conditions including prices are not illegal provided the result does not amount to an agreement to fix prices. The government, in the original petition to dissolve the steel combination, concedes this by stating,

⁵³ The efforts of the Yellow Pine Manufacturers' Association to raise the price of lumber were declared unlawful. Although the association disclaimed any effort to raise prices, in the system of published current prices compiled by the secretary from reports of members, only the higher prices were given. The result was that prices constantly advanced and that "while a rigid adherence to the price fixed was in the nature of things well nigh impossible, yet the prices charged revolved about the prices fixed like planets in their orbits revolve about the sun." A writ of ouster was suspended upon the condition among others that the respondents would in the future sell lumber in free and open competition, and that they would not be a party to the publication of any price current except such as gave honest information with respect to actual and bona fide sales of such products and the prices paid therefore. It is to be noticed also that this decision sanctions the collection and dissemination of such information as is desired for the operation of the open price plan. *Cf. Trust Laws and Unfair Competition*, pp. 719, 720. *State v. Arkansas Lumber Co. et al.*, 169 S. W. 145, 176, 177, 179.

⁵⁴ *Farm Machinery Trade Associations*, Report of the Bureau of Corporations, dated March 15, 1915. The National Association of Wagon Manufacturers, the National Plow Association, and the National Implement and Vehicle Association were all very active in furthering the adoption of a uniform cost accounting system but their methods differ from those of well directed open price associations in that they discussed and recommended future prices. Report, pp. 23 *et seq.*, 45, 46 *et seq.* *Cf.* also the discussion of the significance of the cost system in relation to selling prices, pp. 54-55.

"It is not hereby alleged that merely assembling and mutually exchanging information and declaration of purpose amount to an agreement or combination in restraint of trade."⁵⁵ And in the opinion even more specifically the right to discuss prices is affirmed. However, a distinction is implied between past and future prices. Discussion and declaration of intent as to future prices may have the result of an agreement as to prices. But the open price plan contemplates neither of these; it provides only for a discussion of prices already quoted. Compliance with the association agree-

⁵⁵ *United States v. United States Steel Corporation et al.*, District Court, District of New Jersey, June 3, 1915, 223 Fed. Rep. 55 *et seq.* Speaking of the Gary dinners, Judge Buffington says (pp. 154, 160):

"We may begin the discussion by quoting the Government's concession in the original petition—'It is not here alleged that merely assembling and mutually exchanging information and declaration of purpose amount to an agreement or a combination in restraint of trade.' With this concession we are in full accord. In these days every large business has its societies and associations, and these meet periodically to exchange information of all kinds, to compare experiences, to take notes of improvements in machinery or process, to discuss problems, and generally to profit by the interchange of ideas and the study of observed facts. When the business is manufacturing of course all this has a bearing on the subject of prices, and these conferences may therefore consider that subject specifically. It is probably unusual, however, to find such a meeting a declaration of intention to charge such and such prices, although a mere declaration to that effect could hardly be regarded as unlawful. Freedom of speech and freedom of action are justly prized in American society, and no legislation forbids men to come together and speak freely to each other about every detail of their common business. But at this point we approach debatable ground, for an individual is permitted to do some things that are denied to an association of individuals, and where, at a meeting of many persons, such action is taken whose legality is afterwards called into question, the decision may be vitally affected by ascertaining the fact whether such action was really taken by each individual acting for himself, or whether those present were in fact pursuing a common object. . . . The final test, we think is the object and effect of the arrangement, and both the object and effect were to maintain prices, at least to a considerable degree."

Mr. Eddy analyzes the bearing upon open price associations of this decision as follows:

"1. The fundamental proposition of the open price policy, namely, the right of men to meet and exchange information regarding prices that have been made, is approved.

2. The attempt to go farther and discuss prices to be made is disapproved.

3. The court explicitly recognizes the radical distinction between the analysis of past prices and the discussion of future prices.

4. The only fault found with the Gary dinners is that those present made announcements of intentions regarding prices."

Journal of Commerce and Commercial Bulletin, Nov. 19, 1915.

ment involves simply the giving of certain information. Still, it must be recognized that when competitors meet informally and frequently as they do in many open price associations, the danger is always present that implied or express consideration of future prices will not be completely avoided. Larger associations guard against this by having counsel present at every meeting whose duty is to warn the meeting when debatable ground is being approached. Nevertheless, from various sources it has been learned that in a number of so-called open price associations, price fixation is carried on either because of the ignorance of the members of what they can legally do, or through deliberate intent to evade the law. Needless to say, such associations depart from the open price policy in so doing and the open price organization is simply a cloak for illegal action.

In the last analysis, the legality of this form of organization will depend upon its effect upon public welfare. No matter how legal the type of organization or how innocent the purposes may be, if its actions result in restraining the rights of co-members or others, such actions will be condemned by the courts. If open price methods are rightly employed, the results will in all probability be such as would receive the approval of the law. Open price methods need not result in direct or indirect fixation of prices inimical to public policy.

Conclusion

The open price association is of too recent origin and other influences during the past few years have been too numerous and confusing to permit a study of the price movement in industries affected to have any value. *A priori* one would expect that the interchange of information placing in the hands of each seller the same market data, the accuracy of which is unquestioned, would have a tendency to stabilize prices. That this has been an actual result is asserted by members and officers of open price associations. Stability of prices is desirable; but only if the level is not unreasonably high. There seems to be no reason to believe, if associations confine their activities to study and discussion of past transactions, that the level of prices would be raised to an extent which could be said to be injurious from the standpoint of public policy.⁵⁶

⁵⁶ It is conceivable that by long association the competitors in a given line might be led to regard as normal or desirable a higher margin of profit than that to which they had been accustomed; and in making prices individually

There are advantages both to consumer and producer of the spread through cost accountancy of a knowledge of costs of production. Study and comparisons of costs make for an increased efficiency resulting eventually in higher profits to the producer or lower prices to the consumer, perhaps both. Price cutting due to ignorance of costs is eliminated, to the immediate benefit of producers and to the ultimate good of consumers. Nevertheless, it must be recognized that in a well-developed industry, the costs of production in competing plants will not show great variations and that when prices are made upon the basis of costs ascertained by a uniform system, differences will often be less than before, although competition is not restrained.

Information as to competitors' business affairs, actual sales and transactions, does not prevent the free play of competitive forces. Each concern is as anxious to sell and to increase its sales as before and is as free to quote whatever prices it desires to secure its object. Such knowledge is little different in character from the information given out by our stock or produce exchanges as to bids, offers, and actual transactions; in fact, the furnishing of this information is an important and legitimate function; yet no one would deny the existence of a competitive market in wheat or cotton.

The open price association as an organization which endeavors to increase the profitableness of an industry by placing information as to past transactions at the command of members for consideration and analysis in individually deciding upon future prices has, therefore, potentialities both beneficial and injurious to public welfare. The coöperation of competing concerns in securing and distributing this information appears to be legal as well as economically desirable. Yet the open price organization is peculiarly susceptible of abuse. Whether the advantages of the new type of association will outweigh the disadvantages in actual operation is a question to be answered when the fund of experience and amount of reliable data available is greater and more conclusive than at present.

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act so as to bring this about. In the absence of some basis for monopoly, this condition of higher than normal return would not continue indefinitely. New competition would be attracted and eventually the rate of return would be restored to normal.

RAILROAD EQUIPMENT OBLIGATIONS

At the present time railroad extension and improvement is more a financial than a technical problem. The high operating efficiency of the best of our railroads is one of the most notable achievements of American industry and the low efficiency of the worst of our railroads is due to lack of money rather than to lack of able men or the proper equipment. A railroad, by its very nature, must be continuously expanded and improved, otherwise it cannot keep pace with the social and economic demands put upon it. This cannot be done from earnings alone—except the carriers be allowed to charge excessive rates—so that railroads must come into the market continually for new capital. Then they must compete with other kinds of enterprises for a portion of the available savings fund, and they can succeed in this competition only if fortified by a good credit. In consequence of this continual need for new money the carriers have tried one device after another to reach the investing public with a kind of security, the issue of which shall not be hampered by previous promises and limitations, and which may command a ready and dependable market in competition with other forms of corporate securities. One of these devices is the equipment mortgage obligation—usually called equipment obligation.

Broadly speaking, an equipment obligation is a loan of money based on a direct lien on a specific lot of rolling stock. But, as a class, such obligations cannot be defined precisely because of the varying conditions usually required to render this lien direct and explicit, together with the cumbersome restrictions necessary to maintain a reasonable equity behind a lien on heterogeneous property forever in motion and susceptible to rapid depreciation. Equipment obligations are peculiar in form, in security, and in economic position. They may be bonds similar to other railroad bonds, they may be certificates of participation in a contract to purchase and hold a specific lot of rolling stock, or they may be shares in a permanent association. They are secured by tangible property, yet a kind of property which is movable from place to place and declines in value more rapidly than any other used as a basis of corporate obligations. They rest on the general credit of the corporation using the equipment, yet this general credit has little to do with determining their investment position, which is as a whole stronger than that of any other form of corporate

security. Their legal status has never been fully determined by the courts, yet their legality has never been seriously questioned and they have been given priority over first mortgage bonds in the ultimate test of relative strength. With all these contradictions, it is clear that only the most general statements can be rigidly applied to the group as a whole, and that innumerable exceptions and modifications crop out as attempts are made to draw definite and straight lines of demarcation. It is clear, too, that equipment obligations constitute an extremely complex, but fascinating group of corporate securities.

The first recorded instance of anything like the modern form of equipment obligation was in 1845. The Schuylkill Navigation Company contracted for the purchase of barges to be partly paid for from borrowings. The construction of the barges was to be under the control of the board of managers of the company but "the ownership was to be vested in three trustees, to be held as security for the payment of the loan."¹ After the board of managers had built the barges, they transferred them to the trustees who, in turn, leased them back to the navigation company.²

The modern form of car trust association is to be traced to the Railroad Car Trust of Philadelphia created in 1868 for the purpose of furnishing equipment to the Lehigh Coal and Navigation Company. The idea arose, according to Rawle, in the mind of the president of the road, but the legal details, extremely perplexing in their bearing, were worked out by one Charles Gibbons, a Philadelphia attorney.³ Presumably their origin is to be at-

¹ F. Rawle in *American Bar Association Report*, vol. VIII (1885), p. 322.

² This case seems to have been sporadic although almost identical in form with the issue of equipment obligations at the present time under the so-called Philadelphia plan. In this Schuylkill Navigation case, cars as well as barges were afterward included and the trustees issued bonds bearing interest and payable in ten annual instalments. The plan was subsequently modified to permit the trustees to sell the equipment and redeem the bonds with the proceeds. For description of early forms see F. Rawle, *American Bar Association Report*, vol. VIII (1885), p. 277.

³ In February, 1896, Mr. Oliver Adams, writing to the *Commercial and Financial Chronicle* (vol. LXII, p. 259) regarding the death of his father, William Adams, which occurred in England on January 31, 1896, said, "In 1873 he, in conjunction with myself, inaugurated the system of equipping railways in the United States with rolling stock on what is now known as the car trust plan." Although Mr. Adams did much to further the idea he cannot be considered the first in the field. Cited also *Com. & Fin. Chron.*, vol. LXXXI, p. 1760.

tributed to the efforts of this lawyer to surmount a legal obstacle. The Pennsylvania courts would not allow that a "conditional sale" of the moving equipment by the trustee to the road should serve as the basis of an obligation as against a third party.⁴ That is, the trustee could not hold unquestioned title to the equipment, even though the title remained in his name, if he sold it to the road on the usual instalment plan.⁵ Accordingly he adopted the legal subterfuge of holding absolute ownership of the equipment until it had been entirely paid for by the road. Such a legal subterfuge has proved sound, provided it involves no intentional deceit nor injustice. As advanced by the Supreme Court, long ago in one of its few adverse decisions: "Contracts by which railways, insufficiently equipped with rolling stock of their own, lease or purchase, under the form of a conditional sale, such equipment from manufacturers are not of uncommon occurrence, and when entered into *bona fide*⁶ for the benefit of the road have been universally respected by the courts."⁷

⁴ Early case, *Lehigh, etc. v. Field*, 8 Watts and Sergeant 232.

⁵ Pennsylvania is probably the only state which does not permit the "conditional sale" to form a proper basis for security of a lien on equipment. Although this anomaly has proved very annoying to the railroads and their attorneys, the circumventions adopted by lawyers to avoid it have given rise to the strongest known form of equipment obligation. This will be described in detail presently as the so-called Philadelphia plan.

⁶ It is very important that the equipment trust be *bona fide*. Important decisions adverse to equipment obligations have brought out the fundamental principles that there shall be no direct or constructive fraud attendant upon their issue. The entire proceeding must be clear and nothing must occur to give rise to the implication that some creditors are in danger of being defrauded. Under no circumstances must directors of railroads become parties in such manner that they may profit individually. See *Drury v. Cross*, 74 U. S. 7 Wall. 299; *Twin Lick Oil Co. v. Marbury*, 91 U. S. 587; *Wardell v. U. P. Rd. Co.*, 103 U. S. 651. One of the most interesting of the adverse cases showing constructive fraud in a variety of lights is *McGourkey v. T. and O. C. Ry.*, 146 U. S. 536. It actually shows the strength of the equipment obligations issued under the form of the Philadelphia plan because it involved the admission, by every member of the Supreme Court, that such obligations, when issued *bona fide*, were legal. Furthermore, although the entire evidence showed that the form of the lease was resorted to in this case merely as a legal subterfuge to cover up actual fraud—never has there been a clearer case of attempted fraud—the Chief Justice of the Supreme Court and one other dissented on the ground that even constructive fraud did not invalidate the priority of the equipment trust lien in favor of a third party.

⁷ *McGourkey v. T. and O. C. Ry.*, 146 U. S. 551 (1892). A careful summary of the court decisions and legal opinions down to 1885, when the fundamental

Although conceived in the beginning as a means of enabling new⁸ or impoverished roads to acquire equipment when their own borrowing capacity was small, equipment obligations are now used by the strongest roads in the country as a means of borrowing to better advantage than through the issue of general mortgage bonds. The growth of their use was slow at first because associated with emergency financing. By 1890 the total outstanding volume of equipment obligations was less than \$50,000,000 while in 1899 the amount had declined to approximately \$42,000,000.⁹ Due largely to the use of the equipment loans by the strongest roads in the country the total of such obligations rose with great rapidity from 1902 to 1905—from less than \$90,000,000 to approximately \$200,000,000.¹⁰ Since then the practice of financing separately the purchase of equipment has become so common that at the beginning of 1915 the United States and Canadian roads had outstanding over half a billion dollars of equipment obligations,¹¹

attitude of the courts was being shaped is given by Rawle, *op. cit.*, p. 277. The legal phrases were carried down to 1894 in *Car Trusts in the United States*, by Gherardi Davis and G. Morgan Browne, Jr. For important decisions note particularly *U. S. v. N. O. Rd.* 79 U. S. 12 Wall 362; *Fosdick v. Schall*, 99 U. S. 235; *Meyer v. Western Car Co.*, 102 U. S. 1. These cases have, apparently, established the fundamental law of equipment obligations. Their strength, from the legal point of view, is shown by the fact that there are few if any important recent Supreme Court decisions dealing with the legal status of this form of security. Although a multitude of railroad failures have involved the adjustment of equipment obligation claims, the law upholding their strength has been so firmly established that it has not been thought worth while to carry to the court of last resort a point of possible difference.

⁸ Stated directly as late as 1894 by Davis and Browne, *op. cit.*, as the chief reason: "Inasmuch as a very large number of railroads are not, at the time of their organization, in a condition to purchase a sufficient amount of rolling stock outright, and as, at the same time, manufacturers and owners of rolling stock would often hesitate to accept the obligation of a railroad of perhaps doubtful future, even when secured by collateral, in payment for cars and engines, some other security or means of protecting the manufacturer became necessary."

⁹ In 1890, \$49,478,215 and in 1899, \$42,058,348. These figures are those of the I. C. C. adjusted by the editor of the *Commercial and Financial Chronicle* (vol. LXXXI, p. 1760). They include the Canadian Pacific but not the other Canadian roads. The equipment obligations of the Canadian Pacific alone amounted to approximately \$2,000,000 for both years.

¹⁰ *Com. & Fin. Chron.*, vol. LXXXI, p. 1760. Same basis of computation as described in preceding note.

¹¹ Coggeshall and Hicks, New York bankers, computed with great care the outstanding equipment obligations as of Dec. 2, 1914, as \$519,000,000. Freeman and Co., New York, have also published a detailed manual giving the outstanding trusts, as of Jan. 2, 1917.

an amount over twelve times as great as that of 1899.¹² The practice, having been firmly established among steam railroads, has now been extended to other carriers—particularly electric railroads. It should be said, however, that there is still a general prejudice against the use of equipment loans by electric roads and their use is even now an indication of poor credit.¹³

There are various reasons that have led railroads to use equipment obligations, but two are of especial importance—economy and the avoidance of the “after acquired property clause.” Subordinate reasons call for little comment as the present rapid increase of equipment loans never would have occurred had the railroads not found it possible to borrow cheaper in this way than by the issue of junior securities.

Most railroads long ago have mortgaged, to the full, their main lines, so that the only available basis of credit remaining is an inferior lien. The securities based on this inferior lien would naturally command a low market price—another way of stating the fact that the new money obtained from the sale of these junior securities would cost the road a high rate of interest. When at first the issue of equipment obligations was looked upon as a sign of weakness investors avoided them as an inferior makeshift security. The rates paid by the carriers were, therefore, no lower than what would be paid on the junior securities.¹⁴ But gradually banks and investors realized that equipment obligations constituted a special

¹² The following table shows the growth in the amount of outstanding equipment obligations, among some of the stronger roads. (Even thousands.)

	1900	1905	1915
Pennsylvania	\$11,572,000	\$40,000,000	\$40,130,000
New York Central	0	2,462,000	51,802,000
Southern Railway	2,430,000	13,470,000	17,134,000
Norfolk & Western	1,154,000	6,800,000	12,500,000
A few strong roads have discontinued the practice.			
Union Pacific	2,257,000	0	0
Northern Pacific	3,000,000	140,000	0
Atchison	481,000	400,000	0
With one road the amount seemed to vary with its credit.			
Missouri Pacific			
(including Iron Mountain)	1,043,000	12,970,000	7,397,000

¹³ Such instances are the three issues by the Hudson & Manhattan Railroad and the recent (Sept., 1916) one by the Connecticut Company.

¹⁴ The early equipment obligations were issued almost exclusively to give new or impoverished roads equipment, and the low credit of the road was carried over to the equipment obligations. All issued before 1885 bore high rates of interest. For illustration, the Ohio Central Car Trust created in 1880 bore 8 per cent interest. Rates as high were by no means uncommon prior to 1885.

class by themselves to which the ordinary canons of railroad credit did not apply. The strength given them by the early court decisions has, too, so increased the demand for them that the rates at which equipment issues are taken by the public now compare favorably with those of any other single class of corporate securities.

This low rate of yield for equipment issues is shown empirically by comparing their average yields with that of the senior and junior issues of the same road.¹⁵ To accomplish this comparison, the average yield of all equipment issues of a single road, that commanded a general market, was computed.¹⁶ This average is the entry in the first column. (P. 360.) The yield for the senior bond issues of the same roads was computed by averaging the yields on all the first mortgage, main-line bonds. In some cases not more than one or two issues could be used, but as these command a wide general market they indicate clearly the position of the road's fundamental

¹⁵ In the actual computation I made a more or less random selection of six roads typical of each of four grades of railroad credit: Class A, roads of very strong credit; Class B, roads of medium credit; Class C, roads of poor credit; and finally Class D, roads in the hands of receivers. The spring of 1916 was selected as, on the whole, the best time to use as the basis of the calculation, and March 16, 1916, was chosen arbitrarily as the day to use as the basis for bond prices. The reasons for selecting this time were as follows: Some recent date should be chosen, or else one considerably antedating the European war, in order to minimize the influence of international factors on railroad credit. During the spring of 1916 many roads were in the hands of receivers, but these same roads were enjoying some degree of prosperity, so that their credit was not regarded as hopeless. Subsequent to the spring of 1916 plans for the reorganization of several of these roads had been published so that the market values of their various securities depended more on the treatment at the hands of reorganization committees and only incidentally upon their fundamental credit position. Furthermore since the middle of 1916 there have been on the one hand so many short-time foreign loans that the attention of banks has been directed away from all domestic short-time securities and, on the other hand, a plethora of gold has very much befogged the judgment of bankers regarding their security investments. Banks are large customers of railroad equipment obligations. On the whole, therefore, economic and monetary conditions seem to make the spring of 1916 a better time to select for a comparison of railroad credits than any time since.

¹⁶ Although these issues are not regularly quoted in the exchanges this computation was relatively simple. Three investment houses in New York make a specialty of these issues. From one or all of these it is possible to obtain a "bid" on practically every equipment issue and a firm "offer" of a great many issues. Furthermore half a dozen brokers are more or less specialists in "equipments" and their "subject offers" afford a close market. No distinction was made between "Philadelphia plan" certificates and equipment bonds.

credit. The junior or general credit of the road was computed in the same manner from the average yield on the refunding and the general mortgage bonds¹⁷ and the debentures—if any—but without reference to the guaranteed issues.¹⁸

Summarizing these results, therefore, it appears that the average investment yield for solvent roads was 4.31 per cent for the equipments, 4.61 per cent for the senior mortgage bonds, and 5.29 per cent for the junior or general credit bonds. The economy of borrowing through equipment obligations is apparent. It is also apparent that the equipment obligations of insolvent roads maintained a credit hardly second to that of their underlying first mortgage bonds. This conclusion is in accordance with the actual practice of railroad administration. A road which cannot sell bonds can always sell equipment obligations and that at rates which make the borrowing in no sense a burden. Even when refunding and debenture bonds can be sold easily it is ordinarily more economical for the management to issue equipment obligations, to cover such expenditures as must be made for new rolling stock.¹⁹

The second advantage concerns the "after acquired property clause." Bridges, terminals, and branch lines are frequently built by subordinate corporations so that the new property may not pass, automatically, under some old mortgage which contains a clause to the effect that all property subsequently owned by the road becomes subject to it. In the same way, the trustee of an

¹⁷ In several cases first mortgage bonds on unimportant branch lines were considered as general credit obligations. Convertible issues of all kinds were omitted.

¹⁸ The practice of some statisticians of using the guaranteed issues of a road as a basis of computing its general credit is misleading. Besides the anomalous character of a guarantee—as shown by the Western Pacific case on the one hand, and the Ozark and Cherokee Central case on the other—the value of a guaranteed bond rests, in the minds of investors, much more on the value of the property than on the guarantee. Take the Southern Pacific, for example, a system prolific in guarantees. Its general credit, based on the San Antonio and Aransas Pass 1st 4s would be 7½ per cent on the Houston and Texas Central 1st 5s, 4½ per cent—both guaranteed branch line roads. The guaranteed and the unguaranteed Houston East and West Texas 1st 5s sell on exactly the same basis.

¹⁹ It stands to reason that money cannot be borrowed on equipment and used for other purposes. In the old Ohio Central case (146 U. S. 536), one of the few instances of the abuse of equipment obligations, over a quarter of the total money borrowed on the equipment was used to purchase a coal property and to pay off previous indebtedness of the road.

equipment obligation, retaining title to the rolling stock holds it back from the lien of any such prior mortgage,²⁰ and makes it

	Average yield of equipment obligations	Average yield of premier securities	Average yield of general credit securities
<i>Class A. Roads of very strong credit.</i>			
Pennsylvania	4.05	4.042	4.354
Chicago & Northwestern	4.10	4.242	4.507
Norfolk & Western	4.10	4.197	4.54
Atlantic Coast Line	4.12	4.323	4.87
Delaware & Hudson	4.15	4.08	4.41
New York Central	4.30	4.246	4.698
Average	4.137	4.188	4.536
<i>Class B. Roads of medium credit.</i>			
Southern Pacific	4.15	4.575	4.966
Baltimore & Ohio	4.17	4.516	4.865
Central of Georgia	4.25	4.52	4.96
New York, New Haven & Hartford	4.30	4.40	5.392
Hocking Valley	4.30	4.72	4.87
C. C. C. and St. Louis	4.35	4.95	5.35
Average	4.253	4.613	5.067
<i>Class C. Roads of poor credit.</i>			
Chesapeake & Ohio	4.30	4.60	5.18
Southern Railway	4.35	4.923	6.04
New York, Ontario & Western	4.40	4.95	5.45
Seaboard Air Line	4.40	4.987	6.10
St. Louis Southwestern	4.90	5.10	7.40
Chicago & Alton	4.90	5.70	7.50
Average	4.54	5.04	6.28
Average for solvent roads	4.310	4.614	5.294
<i>Class D. Roads in hands of receivers.</i>			
Chicago, Rock Island & Pacific	5.05	4.97*	†
Missouri, Kansas & Texas	5.30	5.40	
St. Louis & San Francisco	5.35	4.95	
Missouri Pacific	5.40	4.70	
International & Great Northern	5.70	6.75	
Pere Marquette	6.00	8.20	
Average	5.47	5.83	

*The yields computed for the premier securities of roads in the hands of receivers are not as reliable as the previous calculations, because based only on one or two separate securities. These are, however, the old underlying first mortgage bonds on the main line trunk stem. Such securities have their values but little affected by the receivership of the whole system.

†The general credit securities were in default and no computation of investment yield is possible. They were quoted all the way from 44 per cent of par for the debentures of the Rock Island road down to 6 per cent of par for the debentures of the Pere Marquette.

²⁰ Leading early case *United States v. N. O. Railroad*, 79 U. S. 12 Wall. 362.

possible to use the rolling stock as the basis of its own purchase money loans.

In addition to these two main reasons there are, as has been said, others which sometimes influence the issue of equipment obligations. The tax laws of a state may subject bonds to a personal property tax, while the equipment certificates, being certificates of part ownership in physical property, escape. Again the bankers of the road may believe there is a better demand for the road's obligations with banks than with private investors, and equipment obligations are especially favored by banks. Still again the car and locomotive manufacturers are often willing to accept an equipment obligation in part or for nearly the whole payment of railway purchases on cheaper terms than the railroad can obtain by selling its own bonds and using the proceeds to reimburse the manufacturers. This is especially true at a time of slack business activity combined with high interest rates.

In substance, all equipment obligations are direct liens on rolling stock, but as now issued they may be divided into two great classes—those issued under the Philadelphia plan of a lease and those issued under a direct mortgage, sometimes, without reason, called the New York plan. As the Philadelphia plan is at once the most individual and the most complex, giving rise to the strongest kind of railroad obligation, it will be described first in considerable detail.

The Philadelphia plan²¹ of issuing equipment obligations, as it has now been crystalized into more or less regular practice, consists of a device whereby the railroad makes an initial payment towards the purchase of a definite number of cars or locomotives, but does not acquire the title to the property until it has met the unpaid

²¹ Certain specific reasons explain the association of equipment obligations with Philadelphia and Pennsylvania. (1) They originated among Pennsylvania corporations. (2) The conditional sale is not a legal basis for a direct equipment obligation. (3) Car trust certificates, although having mortgage bond security, yet as certificates of part ownership in physical property, have been considered non-taxable when held by Pennsylvania holders. (The best legal opinion now is that this question has never been finally adjudicated.) (4) The location in Pennsylvania of large equipment companies. (5) The example of the Pennsylvania Railroad, although this reason has been effective only a short time.

balances.²² The road uses the equipment under a lease but never obtains even conditional ownership until it has paid the entire purchase price. The procedure is made clear by observing the steps of a typical case. A railroad desires to acquire some new cars. It enters into a contract with the manufacturer, who builds the cars according to the specifications of the road. When the equipment is ready for delivery, the road then enters into an elaborate agreement with some individual, a trust company, or association created for the purpose, under which the latter shall acquire and pay for the equipment nearing completion and lease it to the road.²³ The individual, trust company or association becomes the actual and legal owner of the equipment, not merely the trustee. About one tenth of the necessary money is supplied by the road and the other nine tenths is obtained from bankers and ultimately from investors through the sale of participation certificates based on the security of the equipment itself and the pledge of the lease. This lease involves at least five provisions.²⁴ First the railroad or lessee promises to pay the owners or lessors each year an amount of money necessary to meet all the interest on the notes or participation certificates then outstanding together with a certain instalment on the unpaid portion of the entire issue. Secondly, the railroad promises to keep the equipment repaired and insured, and also to replace any cars burnt or destroyed. Thirdly, the railroad promises to put a name plate on each car describing it as the property of the owner or lessor and to use no lettering so as to imply that the road is itself the actual and legal owner of the rolling stock. Fourthly, the road promises that, in case it fails to meet any part of its obligation,

²² The best and clearest account of the course of the procedure is, in the opinion of the present writer, an editorial in the *Commercial and Financial Chronicle*, vol. LXXXII (1906), p. 839.

²³ In very rare cases there is no trustee, the manufacturing company leasing the equipment directly to the road—as in St. Louis and San Francisco R. R. Series M (1907) the Pullman Company leased the cars directly to the road.

²⁴ The Committee on Railroad Bonds and Equipment Trusts of the Investment Bankers Association found that trustees had been negligent in insisting that the provisions of the lease be fully lived up to. The committee suggested certain reforms. Chamberlain gives an outline of these in a recent popular article. He also summarizes certain clauses that should be present in an equipment trust agreement. *Moody's Magazine*, vol. XVIII, p. 135. The suggestions on the part of the committee are excellent, but its effects are likely to be frustrated by one difficulty—Who shall pay the trustee for continuously checking up its trust?

especially if it fails in its payments, it will assemble at one point the entire equipment covered by the lease and deliver it over to the lessor or owner. Lastly, the lessor agrees that on the payment of the last instalment it will execute a bill of sale to the road conveying to it the title of the rolling stock. From this description it is clear that the whole purpose of the agreement is to avoid giving the railroad even a semblance of a title to the equipment while it is using it but at the same time provide an arrangement which shall enable the road to pay gradually for it and ultimately to own it. The security is never the credit of the road but the merchantable value of the rolling stock itself; yet the road has the full and free use of the rolling stock while it is paying for it as if it were its own.

When equipment obligations are not issued under the Philadelphia plan the railroad acquires the rolling stock and then deeds it in trust to a trustee as in any other mortgage. Or the trustee acquires the equipment directly and delivers it to the road under a conditional sale agreement. Such obligations, being based directly on the credit of the issuing road, with the collateral pledge of the equipment, are called equipment bonds.²⁵ They are an outgrowth

²⁵ Unfortunately the nomenclature on this subject is by no means clear. The railroads and especially the investment bankers have *seemingly* sought to befog the public mind. If issued under the straight Philadelphia plan, the obligation is not that of the railroad (although it may be and is often guaranteed by the road), but merely of the trust estate of the equipment. The trustee may be represented by a private person, a trust company, a car manufacturer, an association, or all these acting together. The point is, the certificate is the right to participate in certain property held under trust, which includes (1) the equipment, (2) the legal instrument or lease under which the owners or trustees look forward to the final sale to the railroad. An equipment bond, on the other hand, is merely the promise of the road to pay the bearer or registered owner a certain sum, a promise resting on the pledge of equipment with a trustee. An "equipment bond" is not issued under the Philadelphia plan, except by the use of a misnomer. There have been and are today many attempts to combine the two ideas, but, on analysis, it will appear that the obligation is reducible to one or the other class. The term "equipment note" is sometimes used, and may refer either to the Philadelphia plan certificates or to the bond. Also various roads have tried to combine the two forms by acquiring the equipment, deeding it to a trustee, and then leasing it. This is an unfortunate subterfuge. Some roads, too, have issued an out and out equipment bond, but have sought to give it the appearance of a Philadelphia plan certificate by bringing in the lease idea. An editorial in the *Commercial and Financial Chronicle* (vol. LXXXII, p. 361) succinctly reviews the confusion in names, and attempts to clarify the essential differences in form. The statement given there is the clearest in print.

of the original Philadelphia car trust certificates²⁶ and represent a distinct emasculation of the strength of the earlier obligations. The road has some kind of a provisional title to the equipment²⁷ whereas in the Philadelphia plan it has not the slightest semblance of a title. Therein lies the strength of the Philadelphia form of obligation.²⁸ Except in legal details the two methods of issue are based on the same idea—a mortgage on equipment to be liquidated by the road through instalment payments.

The issue of equipment obligations seems to be a matter of individual policy among the roads. Before 1892 it could be said with considerable show of evidence that their issue was, with a single exception, confined to weak roads, but since 1900 roads of the strongest credit have resorted to this means of borrowing. Among the strong roads, the Pennsylvania had in 1915 over \$40,000,000 of equipment obligations, and the New York Central over \$50,000,000.²⁹ On the other hand the roads under the management of J. J. Hill had not a single dollar of equipment obligations³⁰ nor had the Delaware, Lackawanna and Western, nor the Union Pacific

²⁶ The extensive issue of straight equipment bonds, without even the form of the Philadelphia plan, is comparatively recent. It is to be traced to the adoption of the use of equipment loans by the roads of strong credit, outside of the Pennsylvania system, and would not go back more than ten or twelve years. It is true that some of the coal roads were using equipment bonds before 1890 but the instances are rare. There were probably no straight equipment bonds prior to 1885.

²⁷ Even then under the conditional sale, except in Pennsylvania and possibly one or two other states, the title is considered to remain with the trustee. One of the latest decisions covering this point states: "The title to the equipment sold under the contracts here involved remained in the vendors until fully paid for. The interest of the railroad companies and their mortgages was but an equitable interest, and subject to the terms of the conditional sale." *Metro-politan Trust Company v. Railroad Equipment Company*, 108 Fed. 918 (1901).

²⁸ An excellent illustration of the difference of strength in the two kinds of issues is afforded by the reorganization of the Norfolk and Western Railroad. There were at the time of the failure two groups of equipment obligations: (1) Equipment mortgage 5 per cent bonds of 1888, \$4,114,000 outstanding. These were not issued under the regular Philadelphia plan. (2) Car trust obligations, various issues and maturities, \$3,125,000 outstanding. These were issued under the Philadelphia plan in its simple form or with certain unimportant modifications. In the reorganization, the equipment bonds were disturbed, the holders receiving new bonds and stock, whereas the car trust obligations were paid in cash, although it required over half the \$5,555,000 of money raised for immediate needs. Plan given in *Com. & Fin. Chron.*, vol. LXII, p. 641.

²⁹ See note 12.

³⁰ Except about \$1,400,000 of the Colorado and Southern.

railroads. Among the roads of weak credit the St. Louis and San Francisco was overloaded with equipment liens, whereas the Western Pacific and the Boston and Maine, weak roads in opposite parts of the country, had no equipment obligations. Nor can there be any sectional generalizations, although the far-western roads as a class show the least inclination to issue such obligations and the coal roads in eastern trunk line territory perhaps the most. Yet, when all is said, the question is reduced to the specific financial policy of individual roads.

The physical equipment itself that is covered by the lien is usually diversified.³¹ It covers in the great majority of cases, both locomotives and cars.³² When issued to cover a single class of equipment this class is usually of the standard form used in large

³¹ Of the 320 separate equipment issues of American Railroads existing at the beginning of 1915 only 78 or 24 per cent were mortgages on one kind of equipment alone, the remaining 242 issues or 76 per cent covered more than one kind. In making this and some of the later statistical computation the writer has made liberal use of the very valuable publication of the Guaranty Trust Company of New York entitled *Railway Equipment Obligations*.

³² The following are two typical equipment trusts. They have been selected at random merely by way of illustration.

Mobile and Ohio R. R. Co. Equipment trust series "F," 4½ per cent interest. Dated March 1, 1912. Due \$23,000 each March 1, and \$22,000 each Sept. 1, 1922. Equipment cost \$500,615. Obligations issued \$450,000.

Security: 4 Pacific locomotives, 2 Mikado locomotives, 6 steel passenger cars, 4 steel underframe mail and baggage cars, 1 steel underframe express car, 334 steel gondola cars, 50 steel underframe automobile box cars.

Louisville and Nashville R. R. Co. Equipment bonds series "A", 5 per cent interest. Dated June 2, 1913. Due \$325,000 to June 1, 1923. Equipment cost \$7,226,420. Obligations issued \$6,500,000.

Security: 20 freight locomotives, 4 Pacific type locomotives, 26 steel underframe passenger cars of three types, 2 steel underframe baggage and mail cars, 8 steel underframe baggage cars, 5 steel postal cars, 3,000 all steel hopper and gondola cars, 39,000 freight and gondola cars of eight types, 80 cabooses.

An extreme case of diversification is represented by Chicago, Rock Island and Pacific Railway Company's equipment 5 per cent notes, series "H." Dated July 1, 1913. Due \$441,000 semi-annually to July 1, 1923. Equipment cost \$5,521,348. Obligations issued \$4,410,000.

Security: 25 Mikado type locomotives, 30 six-wheel switching locomotives, 30 Pacific type locomotives, 2 mountain type locomotives, 1,500 steel underframe box cars, 500 steel gondola cars, 50 caboose cars, 18 steel chair cars, 20 steel coaches, 5 steel three compartment passenger cars, 7 steel smoking cars, 10 steel baggage cars, 8 steel dining cars, 4 steel horse express cars.

quantities by different railroads.³³ The cost of the equipment is usually 10 per cent in excess of the original issue although the stronger roads such as the Pennsylvania³⁴ and the subsidiaries of the New York Central³⁵ have issued notes for the full purchase price of the equipment. In very rare cases an equipment trust has been formed to cover rolling stock already used, so as to give the road money to make repairs.³⁶

It is extremely difficult to form an accurate idea from the outside of the real cost and value of the equipment covered by any issue, unless it is of one standardized pattern.³⁷ The provision in

³³ Steel gondola cars are most frequently used when the issue covers only a single form of equipment. There were in 1916 approximately 21 equipment issues covering these cars alone.

³⁴ Of a total of nine series of equipment issues of the Pennsylvania Railroad outstanding April, 1915, all were originally issued for the full value of the equipment acquired.

³⁵ For example Kanawha and Michigan Railway, Equipment Car Trust of August 15, 1906.

³⁶ The Detroit, Toledo and Ironton Railroad equipment notes of 1914. The issue is explained, of course, by the low credit of the road. This trust was created when \$2,000,000 was borrowed to repair 1763 coal cars. It is unusual in bearing 6 per cent interest and maturing in three years. The borrowing was excessive as new cars could have been bought for less money. This railroad and its predecessor have afforded the case *célèbre* of equipment issues. See note 53.

³⁷ The following table gives a few averages of the cost of standard equipment. The averages are deduced from a random selection of different equipment issued covering a single class of rolling stock; they include practically all of each type outstanding between Nov. 1, 1914, and Feb. 1, 1917.

Kind of equipment	Number of Series	Total number of pieces	Total cost	Cost per unit
Locomotives (not special type)	17	473	\$8,212,443	\$17,362
Steel underframe boxcars	13	30,636	35,067,383	1,112
Steel underframe refrigerator cars	6	3,525	6,285,055	1,782
Steel gondola cars	8	10,500	12,491,946	1,182

It is difficult to check these figures by the actual contracts. A writer in the *Analyst* estimates the average net cost of a standard 40 ton steel underframe box car for the eight years from 1908 to 1916 to be \$947, with extremes from \$844 to \$1,200. The average in the above table of \$1,112 seems to indicate excessive prices paid or else inflation of the costs. Owing, however, to the extreme variation in demand, there is a remarkable difference of cost of the same equipment according to the time of purchase. This subject is ably discussed with statistics in the *Analyst*, vol. VII (Jan. 24, 1916), p. 116.

the lease agreement that is of most real consequence is that dealing with the rapidity with which the total loan is to be paid. Under all circumstances, railroad equipment wears out rapidly and is growing obsolete constantly.³⁸ Were there no means of fully maintaining the equity behind an equipment lien, therefore, it would be the weakest kind of corporate security. But it is the strongest; for by making it obligatory on the part of the road to pay off the obligations faster than the equipment wears out, the equity to the note-holders is not only maintained but increased. To achieve this result, certain definite presumptions must be made, the most important of which is the true rate of depreciation.³⁹ For

³⁸ It is usually contended by railroad engineers that obsolescence is greater with locomotives than with any other form of equipment. While this may be true, it should be remembered that an obsolete locomotive can be used on branch lines and for company work whereas obsolete freight cars are uneconomical however employed. Obsolete passenger cars are even worse because besides being inefficient, they usually tend to create ill feeling in the minds of the patrons of the road.

In the opinion of the present writer that class which suffers least in value through use—both physical depreciation and obsolescence—is the steel under-frame tank car for the transportation of petroleum products.

³⁹ The depreciation of rolling stock has been the subject of many elaborate studies. Unfortunately, these have led to no unanimous conclusion. The Master Car Builders Association estimates for cars as follows: wooden bodies and wooden underframes 6 per cent annually; wooden bodies and steel underframes $5\frac{1}{2}$ per cent; metal bodies, steel underframes and trucks 5 per cent. This basis was taken by the statistician of the Guaranty Trust Company in figuring margin of safety for equipment obligations. See *Railway Equipment Obligations* (third edition), p. 9. Chamberlain uses rough estimate of 15 to 20 years as the life of equipment. See *Principles of Bond Investment*, p. 309. The Pennsylvania road has used 3 per cent for freight cars and 4 per cent for locomotives. Rates have varied. See T. R. Lill, *Jour. Account.*, Jan., 1917, p. 1, giving statistics. Now, while it is perfectly true that the development of steel construction, particularly the steel underframe, has very much increased the serviceability of the car it is not clear from records that the salable life of the car is any longer. The investigations of the Master Car Builders Associations and the various studies that have appeared from time to time in the railroad periodicals have assumed the existence of, and have sought to determine a theoretical period of usable life for railroad rolling stock. Such a computation is not sufficient for the equipment bondholder because, from his point of view, the value of rolling stock is not its theoretical usable value, but its salable value. The two criteria are essentially different. A car may have a theoretical life, based on an arbitrary depreciation constant, long after it ceases to have a secondhand sale value. It may be held in reserve for freight congestions when it cannot be sold—except at the very time of the freight congestion. Moreover, the

the purpose of valuing the equity behind the equipment obligations it is necessary to base the calculation on the sale value of second-hand equipment. We may assume that the equipment declined about 85 per cent in value during the first $13\frac{1}{2}$ years, at which time it has a scrap value of about 15 per cent of cost, and that the

constants worked out by the manufacturers are based on mere decline in physical value through use, and presume only an arbitrary and slight, if any, constant of obsolescence. Furthermore, the annual cost of repairs increases as the car ages, so that there comes a time when it is cheaper for a road with credit to "scrap" the cars than to meet the constantly increasing cost of repairs. In fact, after a time, the value of the car becomes a kind of constant scrap value, the use and sale value being functions of the repair charges. From these theoretical considerations and such figures as the writer is able to gather from practical railroad men, he is of the opinion that collections of mixed equipment, such as are cited on a previous page, consisting of ordinary locomotives to about a third of the total cost and the other two thirds standard cars readily usable by other roads, has a salable life of about $13\frac{1}{2}$ years. At the end of this time it has a scrap value of about 15 per cent of its original cost. This scrap value suffers only slight diminution during the next five to ten years, provided sufficient sums are annually spent in repairs to take care of the obvious decays and breakages. For purposes of computation, we may assume, therefore, that the equipment declines 85 per cent in value during the first $13\frac{1}{2}$ years of its life. The decline in salable value appears to be more rapid during the first three years of the equipment's use and less rapid during the last four or five years, than an arithmetically regular decline would imply. The first year, this decline is fully a half more than what the average of the period would be, whereas the decline during the last year is only about a half that of the average. From the fourth to the eighth year, the decline is the average. If these assumptions are approximately correct, we may construct a table showing the percentage of original cost represented by the decline in salable value for each year. It would be something like this:

<i>Per cent</i>				<i>Per cent</i>			
1st year decline	9.5	8th year decline	6.3				
2d " "	8.4	9th " "	6.3				
3d " "	7.4	10th " "	6.3				
4th " "	6.3	11th " "	6.3				
5th " "	6.3	12th " "	5.4				
6th " "	6.3	13th " "	3.2				
7th " "	6.3	14th " "	1.1				
		15th " "	scrap value 15				
			per cent of cost				

It should be remembered that any such computation is inexact and at best a mere guess. It is, however, much more accurate for the purposes of judging the secondhand sale value of equipment, than that of the Master Car Builders Association, which concerns itself merely with usable value based on material depreciation. On the other hand, general economic conditions may entirely upset these estimates. If the equipment is bought just before a general business "boom," it is entirely possible that the subsequent rise in the initial cost prices of equipment and the necessities of the other roads might create a situation such that year-old cars could be sold for more than they cost. It is

decline is most rapid at first. Under such circumstances, the relative equity behind an issue of ten years serial equipment bonds can be shown by a table. The computation assumes that the equipment cost \$1,000,000 of which 10 per cent or \$100,000 was paid before the equipment was received and that 10 per cent of the balance shall be paid the first of each year following.⁴⁰

Beginning of year immediately after instal- ment paid	Volume of certificates outstanding	Percentage of deprecia- tion of origi- nal cost dur- ing preced- ing year	Money value of deprecia- tion during preceding year	Value of equipment	Equity be- hind out- standing cer- tificates	Percentage of value of equipment represented by outstand- ing certifi- cates
						(Per cent)
1	\$900,000	0	0	\$1,000,000	\$100,000	90
2	810,000	9.5	\$95,000	905,000	95,000	89
3	720,000	8.4	84,000	821,000	101,000	87
4	630,000	7.4	74,000	747,000	117,000	84
5	540,000	6.3	63,000	684,000	144,000	79
6	450,000	6.3	63,000	621,000	171,000	72
7	360,000	6.3	63,000	558,000	198,000	64
8	270,000	6.3	63,000	495,000	225,000	54
9	180,000	6.3	63,000	432,000	252,000	42
10	90,000	6.3	63,000	369,000	279,000	24
11 directly after payment of last instalment	0					

Certain inferences may be made from a study of these figures. The most obvious is that the equity behind the outstanding certifi-

quite true that a standard steel underframe box car, bought in January, 1915, could be sold in January, 1916, after a year of reasonable use for more than it had cost; it is even probable that this same car could be sold January, 1917, after two years of use, for what it had cost. Of course just the reverse is true if the equipment is bought at the height of a boom period.

⁴⁰ Similar calculations of the equity behind equipment obligations at varying periods of their life have been made by other writers using slightly different assumptions for the rates of depreciation. Two such calculations have received publicity, in neither of which do the *general* results differ from the computation here given. The Guaranty Trust Company's calculation is based on the Master Car Builders Association's figures for depreciation cited in a previous note. It shows a larger proportionate equity during the first few years of the equipment trust. Chamberlain explains the same principle (*op. cit.*, p. 309) by means of a diagram but is somewhat vague and unscientific in the use of his depreciation constants, though more exact than the computation here given in the use of semi annual rather than annual instalment payments. His diagram shows at a glance, much better than figures, the principle of increasing equity behind the equipment obligations.

cates increases as each instalment is paid in spite of the depreciation of the equipment. In other words, the railroad obligates itself to pay off its certificates more rapidly than the security behind them declines in value. Herein, as was said before, lies the strength of equipment issues. The second inference is that the obligations have least strength, from the point of view of equity, immediately after their issue; and those that mature late have a constantly increasing strength the longer they are outstanding. The strongest equipment obligations obtainable are those of the last instalments of some old series purchased a year or so before its maturity. The figures given in the preceding table show too, that an issue of equipment obligations having more than ten years to run, or one that is paid off in more than ten annual instalments, or is issued for the full value of the equipments does not in itself afford substantial security. It is true that some of the roads with very strong credit issue securities of this sort that are called equipment obligations, but these, in reality, rest much more on the credit of the road than on the equity behind the equipment.⁴¹

⁴¹ All the equipment obligations of the Pennsylvania Railroad are of this class, because issued for an amount equal to the total cost of the equipment. So also are the series A, B, and C of Chicago & Northwestern Railway. The four great equipment trusts of the New York Central lines are of this class because they mature in fifteen rather than ten years. That of 1913 is a conspicuous variation from type in that it is an "open end" mortgage. So also is the single issue of Delaware and Hudson equipment bonds in that it is protected by a sinking fund rather than instalment payments.

The Buffalo, Rochester and Pittsburgh Equipment Trusts (series A, B, C) broke most of the canons in that they were issued for the actual value of the equipment purchased, ran for 20 years, carried a sinking fund of 5 per cent to 6 per cent, which could be invested in other equipment provided the obligations were not purchasable at par.

A practical illustration of the necessity of insisting that the equipment obligations shall be issued in strict conformity to established practice is that of the Wheeling and Lake Erie Railroad 5 per cent equipment bonds, issued in 1902 and payable in instalments of different amounts until 1922. They were therefore irregular in having double the life established by conservative practice. A receiver for the road was appointed in 1908. He continued to meet the sinking fund instalments until January 1, 1915, when he defaulted, and on July 1, 1915, defaulted on the interest. In the spring of 1916, the time at which the previous comparisons were made, the road's underlying first mortgage bonds commanded a 4.92 per cent credit, notwithstanding the receivership. In a previous note it was pointed out that ordinarily the value of equipment obligations is affected but little by receivership. Yet, in this case the certificates yet unpaid declined to only 60 per cent of par, at which price they were selling on a 15 per cent basis—provided one assumed their payment at ma-

It is quite common for the railroad using the equipment to guarantee the car trust certificates covering the equipment it leases. Almost all ordinary equipment bonds issued under the New York plan are guaranteed, although it is questionable whether or not this adds to their fundamental security. When the issue is irregular in some conspicuous respect it is almost always guaranteed by the operating road. Likewise when an equipment trust is created for one or more small subsidiaries it is usually guaranteed by the parent.⁴² In some cases, the notes are guaranteed by the manufacturing company from which the equipment was purchased.⁴³ Frequently the entire issue is subject to redemption by the railroad company,⁴⁴ and sometimes the equipment may be withdrawn from time to time.⁴⁵ Very rarely the equipment security is reinforced by the deposit of bonds with the trustee.⁴⁶

The final test of any security is its position in case of the failure of the enterprise on whose credit it is issued.⁴⁷ Judged by this test, equipment obligations are among the strongest, if not the strongest

turity. Owing to the long period during which the road had been paying for the equipment, the value of the rolling stock had declined to less than the face value of the outstanding certificates; hence the receivers might regard the payment of the certificates as of doubtful expediency. See note 55 for outline of final settlement.

⁴² The four great issues of the New York Central lines are guaranteed principle and interest by the New York Central & Hudson River, the Lake Shore & Michigan Southern, the Michigan Central, the "Big Four," the Pittsburgh & Lake Erie, and the Toledo & Ohio Central railroads.

The Trinity & Brazos Valley Railway, Equipment Trust, Series A, are guaranteed, principle and interest, by two independent corporations, the Rock Island and the Colorado & Southern roads.

⁴³ The equipment notes of the Denver, Northwestern and Pacific Railroad of 1910 are guaranteed by the American Locomotive Company through endorsement on each note; those of the St. Louis and San Francisco Railroad (Series L, 1907) by the American Car and Foundry Company. An extreme case is where an equipment issue of a small road is guaranteed by the interests behind it. (St. Louis, Troy and Eastern, issue of June 1, 1915.)

⁴⁴ Of the three hundred odd issues outstanding January 1, 1917, 56 or about 25 per cent were subject to redemption. The premium varies from 1 per cent to 2½ per cent.

⁴⁵ An old issue of the Michigan Central, of 1906.

⁴⁶ Mexican Central Railway Company equipment and collateral bonds, First and Second Series, are sporadic cases of this. Reading equipment 4½ per cent bonds of 1901, additionally secured by the deposit of \$833,000 Philadelphia and Reading general 4s.

⁴⁷ A clear statement of this in an editorial in the *Commercial and Financial Chronicle*, vol. LXXII, p. 1296.

form of corporate security. When they are issued according to the Philadelphia plan the courts have, almost without exception, considered the insolvent railroad only the lessor of the equipment, which is not therefore, covered by the bonds of the company,⁴⁸ and of which the receiver does not become the trustee. Since the title never rested with the railroad corporation, and the property is movable, the real owner or the lessee has the power to take away the equipment if the railroad violates the contract under which the equipment obligations were issued. Knowing that the railroad cannot be operated without cars and locomotives and that it would be wasteful and inexpedient to sacrifice the equity remaining to the road, receivers have invariably⁴⁹ continued the payments on the equipment trust interest and instalments. If necessary, receivers' certificates, taking priority over mortgage liens, have been authorized to meet these payments. Nevertheless, at the time of reorganization the holders of outstanding equipment obligations have, in a few rare cases, been asked to refund their securities on an advantageous basis;⁵⁰ in still rarer cases they have been asked

⁴⁸ The important case of the Toledo and Ohio Central is no exception to this rule. The certificates in this particular case were not issued under the Philadelphia plan in its unequivocal forms. Some of the equipment was made in the railroad's own shop, some of it was owned first by the railroad, used, and then transferred over to the trustee. So that the United States Supreme Court interpreted the lease as a mere subterfuge to emasculate the lien of the general bondholders of the railroad. This they condemned. See 146 U. S. 536.

⁴⁹ The exceptions of temporary lapse—Denver and Rio Grande; Detroit Southern; Atlanta, Birmingham and Atlantic; Pere Marquette—are so exceptional as not to destroy the strength of the above statement.

⁵⁰ The two cases of the refunding of equipment obligations are the Denver and Rio Grande reorganization of 1886 and the Norfolk and Western reorganization of 1896. The former involved an actual temporary, although not permanent, sacrifice, and will be discussed at length in the succeeding note.

The Norfolk and Western Railroad reorganization of 1896, although involving the refunding of certain equipment obligations did not imply even a temporary sacrifice. There were two classes of equipment obligations outstanding (see note 28); those issued under the Philadelphia plan were paid in money, whereas the equipment mortgage bonds were refunded. For each \$1,000 in equipment mortgage 5 per cent bonds, the bondholder received \$1,000 in new consolidated mortgage 4 per cent bonds and \$480 in new preferred stock. He was compelled to undergo a sacrifice of 1 per cent in yearly income, but this was fully compensated for by the preferred stock bonus. Subsequently, with the success of the rejuvenated Norfolk and Western road, he had an increase in both income and principle.

to undergo what would seem like permanent sacrifices.⁵¹ In contrast, however, to these rare exceptions, it may be said that in prac-

⁵¹ The notable case is that of the Denver and Rio Grande reorganization of 1886. As this is the only instance in the history of American railway finance where the holders of equipment obligations issued under the Philadelphia plan were forced to suffer for a considerable period, the details are significant. The old Denver and Rio Grande had been built in the seventies, one of the numerous far-western lines built long before its construction could be said to be in any way an economic necessity. In the depression of 1883 and 1884 it failed. Disaster also overtook its western extension, the Denver and Rio Grande Western. At the time of the failure there existed a comparatively small issue of first mortgage bonds, the interest on which had been earned unquestionably. There were also approximately \$3,500,000 6 per cent and 7 per cent equipment certificates on which the interest had not been fully earned. Besides this, there were two large issues of junior bonds and much worthless stock practically all owned in England and Holland. Some of the equipment had been used by the Denver and Rio Grande Western in a manner contrary to the spirit of the equipment trust. In the report of Pothonier and Parrish—an interesting example of a foreign report on one of our early, needless roads, built with foreign capital—it was stated: "It will be absolutely necessary to capitalize the rolling stock trusts on fair and equitable terms, or, failing this (the contracts being extinguished by foreclosure), to provide the necessary equipment on the basis of present low prices." (Paragraphs in report quoted *Com. & Fin. Chron.*, vol. XL, p. 181.) The bonds of all issues, together with the stock, were largely held in England and Holland, but the equipment obligations were held mostly in Pennsylvania. Judge Hallett had ordered the payments of the principle of some of the equipment certificates postponed, and the holders had done little to object. Moreover, much of the equipment itself had been allowed to so depreciate as to have little more than scrap value. Some of the bondholders at the time contended that the reorganization committee could then, in the depression of 1885 and 1886, buy better secondhand equipment for less than the par value of the obligations outstanding. At all events the trustees of the car trusts feared being forced to liquidate on the equipment. All these circumstances combined to make the position of the equipment obligations conspicuously weak. It is true that a plan of reorganization was worked out in Philadelphia which involved the refunding of the equipment obligations into first mortgage bonds, but it was not acceptable to the foreign bondholders and its advocates dared not force the foreclosure of the car trusts.

In the reorganization, the small issue of underlying first mortgage bonds was not disturbed. The bondholders reorganization committee first offered the holders of the equipment obligations consolidated (junior) 4 per cent bonds involving a reduction of from 2 per cent to 3 per cent interest, and some preferred stock. Finally, after considerable haggling, they received 17 per cent in cash and 120 per cent in consolidated (junior) 4 per cent bonds for the remaining 83 per cent face value of their equipment certificates. (Total car trusts \$3,476,000, cash payments \$600,000.) The old 6 per cent car trust certificates received in addition 20 per cent in new 5 per cent non-

tically all of the reorganizations of American railroads,⁵² the equipment obligations were either paid in money⁵³ or else assumed directly by the new corporation succeeding to the property of the old one.⁵⁴ In only one instance in the recent history of railroad finance has a reorganization committee forced the holders of equipment obligations to accept a compromise and in this instance the bonds were issued under an unusual and weak agreement,⁵⁵ and in cumulative preferred stock and the old 7 per cent car trust certificates 30 per cent in the same security.

This reorganization of the Denver and Rio Grande was in 1885 and 1886. The Atlanta, Birmingham and Atlantic, reorganized in 1916, had a similar financial structure—a small, strong, fully secured first mortgage issue, a large volume of equipment obligations and a host of junior bonds, notes and stocks. As in the earlier Denver and Rio Grande case, the first mortgage bonds were undisturbed, but in this later case the equipment obligations were practically all paid in money, although the whole mass of junior securities was obliterated, and even receivers certificates were refunded into income bonds. This difference in the treatment of equipment obligations in analogous situations in 1886 and 1916 indicates the almost impregnable position they now occupy.

⁵² Chamberlain gives a brief summary of some 28 cases of railway reorganization in practically all of which the holders of equipment obligations suffered no hardship (*Principles of Bond Investment*, p. 300). The Guaranty Trust Company also cites a long series of reorganizations in which the equipment obligations were undisturbed (*Railway Equipment Obligations*, p. 11).

⁵³ A suggestive sentence bearing on this occurred in the analysis of various securities of the Missouri Pacific Railway issued by all the reorganization committees at the time of the receivership—"§3,867,000 equipment obligations maturing to June 30, 1918: The equities in the equipment securing these obligations compel provision for their payment in cash." Analysis dated October 15, 1915, p. 3.

⁵⁴ A combination of the methods is shown by the St. Louis and San Francisco reorganization plan. The equipment obligations maturing before July 1, 1917, have been paid in money from assessments on stockholders; sufficient prior lien (senior) bonds are reserved to refund those maturing after July 1, 1917, while in the meantime they are assumed by the new company.

⁵⁵ This was the case of the Wheeling and Lake Erie "equipment sinking fund gold bonds," due 1922, described in note 41. They were unusual in running 20 years and in being liquidated through a sinking fund rather than through instalment payments. After the interest had been in default a year, at the time of the reorganization of the Wheeling and Lake Erie Railroad, the reorganization managers agreed to pay the back interest and to pay 35 per cent of the face of the outstanding certificates in cash and to give new 4 per cent "secured sinking fund equipment notes" for the remaining 65 per cent. These new notes are secured by the old unmatured equipment bonds, which in their turn are secured by the equity in the equipment. The reorganized company agrees to buy and cancel one sixth of the new notes each year until the entire issue is redeemed. Considering the weakness of the conditions under which the

two instances only throughout the varied financial history of our American railroads have the equipment bondholders been compelled to assume possession and resell the actual physical equipment itself.⁵⁶ But even in these instances the holders of equipment obligations suffered no loss, the underlying rolling stock being sold for enough to pay the outstanding certificates. This is a remarkable record for any class of corporate securities. It is even more remarkable, for the protection afforded to the bondholder, than the record of municipal and state bonds.

The strength of equipment obligations is evidence, too, of the importance of "use" value in measuring credit. Reduced to the simplest terms, the reason why railroad receivers and reorganization committees honor the equipment loan above all other forms of permanent debt is that the road cannot operate without its rolling stock and the owners can remove it physically from the possession of the road. Long ago the holders of first mortgage railroad bonds learned that their lien could be emasculated through the willingness of the Court to issue receiver's certificates under the authority of the mandate of public necessity. They cannot remove, physically, their road from the jurisdiction of the Court; they cannot even force the receiver to operate the line were he

original bonds were issued, the reorganization managers were exceedingly liberal to the holders of the outstanding obligations.

⁵⁶ The case is of the Detroit, Toledo and Ironton. The road passed into the hands of receivers and the latter, finding the business inadequate for the total equipment and the equity of the road in a certain car trust relatively slight, decided to allow the holders of the trust to exercise their legal rights and take physical possession of the rolling stock. The trust certificates were practically all owned by two interests which bid in the equipment itself. Aside from interest on interest, the holders of the equipment obligations lost nothing, as the new owners were able to "peddle out" the equipment for more than the face of the certificates remaining outstanding.

The other notable case is that of one of the issues of the Buffalo and Susquehanna Railway. This was a very unfortunate venture which, reorganized as the Wellsville and Buffalo Railroad, proved such a failure that it was closed Nov., 1916, and dismantled. The old Buffalo and Susquehanna Railway had four issues of equipment obligations, A, B, C, D. Three were assumed by an allied company, the Buffalo and Susquehanna Railroad Corporation, which has now (April, 1917), paid all of them except \$30,000 and these will be paid in August. The fourth equipment trust, Series B, was not assumed. After considerable negotiation the equipment covered by it was sold to a syndicate of Buffalo men. This syndicate subsequently sold the equipment, and in order to give a free title, deposited with the trustee a sum equivalent to the unpaid certificates and their interest to maturity.

disinclined. No matter what the road cost, no matter what its replacement value may be, they are helpless to enforce their lien. But the equipment bondholders can strangle the operation of the road by removing the equipment beyond the jurisdiction of the receiver. It is this necessity of its use that makes the rolling stock so substantial a basis for credit.

ARTHUR S. DEWING.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Distributive Justice. The Right and Wrong of our Present Distribution of Wealth. By JOHN A. RYAN. (New York: The Macmillan Company. 1916. Pp. xviii, 442. \$1.50.)

In Professor Ryan's first book, *A Living Wage*, published in 1906, he applied the principles of moral theology to the determination of the minimum of justice in wages; in this, his latest work, he applies the same principles to all four shares in distribution: rent, interest, profits, and wages. There is here practically no examination of the basis and justification of rights, but rather a series of deductions from generally accepted rules of justice. There is little dogmatism, however, in Professor Ryan's admirable treatment of the subject; for, as he points out, neither the principles of industrial justice nor the constitution of our socio-economic system are simple, and it is impossible to give to ethical conclusions anything like mathematical accuracy. All that he claims is that his moral judgments are fairly reasonable and the proposed remedies fairly efficacious.

The chief rules of distributive justice are the canons of equality, needs, efforts and sacrifices, comparative productivity, scarcity, and human welfare. Among these the primacy is given to the canon of human welfare, although Professor Ryan does not say that the other canons are derived from it, nor does he clearly trace the relationship between them. All have more or less validity, and any theory of distributive justice which runs counter to any of them is necessarily inadequate.

The right to the "workless incomes" of rent and interest is based chiefly on the canon of social welfare. The taking of rent is just, because private ownership is the best system of land tenure. The taking of interest is right, because it encourages saving and investing as opposed to spending and hoarding. Still, Professor Ryan gives a more hearty approval to rent than to interest-taking, a position quite the reverse of that of most modern economists, who would protect and cherish the loan capitalist long after they had thrown the landowner to the wolves.

Professor Ryan, as is well known, is no socialist, nor even a single taxer. Socialism is impracticable. The single tax system would be much inferior to private ownership of land. Private land ownership, therefore, is a natural right, based on its social

utility. However, it is a limited right, giving no claim to rent until the tenant of average efficiency on a normal holding has first obtained a decent living. The tenant's claim to a decent living is based primarily on "needs," but it is not effectual without a minimum of efficiency. Similarly, the right of other business men to living profits is conditioned upon efficiency.

A more complicated case arises when the tenant employs agricultural laborers, who, because of their needs, are as much entitled to a decent living as the tenant himself. Against whom then, is their claim valid? Professor Ryan offers a very ingenious solution of this puzzle. The right of the laborers to a decent living, based, as it is, on their worth and dignity as human beings, takes precedence, not only of the workless incomes of rent and interest, but also of any surplus profits over and above a decent living for the tenant himself. The tenant, as an employer, is one of society's paymasters, and the laborer's claim is valid primarily against him. He must, therefore, pay living wages, even at the expense of interest in his own capital. He has no right, however, to deduct interest from the loan capitalist from whom he may have borrowed, as the loan capitalist is under no obligation to lend to a borrower who cannot pay interest regularly. Nor may the tenant withhold rent from the landlord, as such a practice would be subject to grave abuse, and the landlord is under no obligation to forego his rent in order that the tenant may employ laborers. Besides, such withholding of rent and interest is quite impracticable, and could not be enforced. Therefore, the duty of paying living wages devolves upon the tenant, or any other employer. If the burden and responsibility is too great, he may go out of business, but while he remains he must pay living wages, even at the expense of surplus profits and interest; and, if he is landowner, at the expense of rent also.

This is a nice point in casuistry, but the solution is not altogether satisfying. The employer may be society's paymaster or agent, but he can hardly be expected to bear the whole burden without substantial support from his principal. If, accidentally, he operates with land and capital of his own, his obligation to pay living wages out of rent and interest is surely not greater than that of the mere landlord or loan capitalist, even though he may realize the obligation more keenly than they. Again, in case he could not shift the burden to the consumers, he might be justified in paying less than a living wage, especially if he were a poor man

whose profits yielded him no more than a decent living. Of course, he might evade the obligation by ceasing to employ, but the laborers' condition could not be bettered in that way. Evidently, the case proves that the obligation to provide a decent living for all poor people devolves upon all who have superfluous incomes. It suggests, also, that the obligation is one of charity, rather than strict justice; unless we are to take the view that, in the last analysis, charity and justice are identical.

Although Professor Ryan approves of the private ownership of land, he recognizes certain defects in the existing land system which call for reform. Among the measures which he favors are the leasing of timber and mineral lands, public ownership of urban lands, state loans to small proprietors, increment taxes, super-taxes on large holdings, and the gradual though partial transfer of other taxes to land, in order to absorb a large part of the future increment. All of these measures find their justification in the canon of social welfare and the canon of needs. Until all the poor have a decent living the right to workless incomes is suspended.

Professor Ryan's discussion of interest is exceedingly interesting. He shows how the medieval prohibition of interest taking was gradually modified to suit the changing economic conditions of modern times. At first arose the theory of "*lucrum cessans*," then that of "*praemium legale*," and finally the theory of "virtual productivity," which was only "*lucrum cessans*" in another form. All the authoritative ecclesiastical declarations indicate that interest on loans is today regarded as lawful because a loan is the economic equivalent of an investment. This, as Professor Ryan well says, "is good logic and common sense." The standard arguments of abstinence and productivity he considers unsatisfactory, and he finds the real justification of interest in its contribution to social welfare. He discusses at considerable length the question as to whether any particular rate of interest above zero is necessary, and arrives at no definite conclusion. Still, it may be that the suppression of interest would cause a considerable decline in saving and investment; and, assuming this, the state is justified in permitting interest, even as the Catholic Church has concluded to permit the taking of interest without definitely approving of it. From this conclusion, it is but a step to the position, which in effect Professor Ryan takes, that interest is justified as an essential part of the system of private property, and that any particular rate of interest is justified if it is a competitive and not a monopoly rate.

Professor Ryan appears to approve of the principle of competition as an ideal regulator of interest, rent, profits, and the prices of commodities. When he comes to the question of just wages, however, he rejects the principle of competition because it takes no account of needs, efforts and sacrifices. And yet, before the Industrial Revolution, when laborers commonly sold their own products, there was no valid distinction to be drawn between a fair wage and a fair price. Even now, in the case of self-employed workers, as many carpenters, blacksmiths, lace-makers, wood-carvers, fishermen, and the like, the only way for the laborer to obtain a decent living is to sell his wares at a fair price. The commodity, therefore, is not a mere thing, divorced from the producer, but a piece of materialized labor, the price of which is the wage by which he lives. As the pathetic Scotch song, "Caller Herrin'," puts it: "Wives an' mithers maist despairin', ca' them lives o' men." If the competitive price, then, is fair, the wages also must be fair, whether they suffice for a decent living or not; but if the wages are unfair, then the price which is their source must be equally unfair.

However that may be, the attempt of Professor Ryan to determine just wages from a consideration of needs, rather than market value, or productivity, is not quite successful. Indeed, he well nigh abandons the canon of needs in admitting that productivity must be considered, and in supporting the claim to living wages by the argument that they will result in greater efficiency on the part of both employer and employee. Yet it must be admitted that the classical economists did not sufficiently consider the laborers' needs, and that reformers of the present day are abundantly justified in laying stress upon this long-neglected aspect of the wages question.

When a decent living has been secured by all laborers, only the minimum of justice has been attained. Complete wage justice demands additional compensation according to the canons of efforts and sacrifices, productivity, scarcity, and human welfare; and if there is still a surplus in the wage fund, it should be equally divided among all the laborers. This is the "equitable minimum" which all employers should pay, after which business men may keep their profits, loan capitalists their interest, and landowners their rent, without any compunctions of conscience. Still, the workless incomes are debatable ground, a sort of no-man's land, which the laborers may occupy, if, by superior organization and bargaining ability, they are able to take possession of it. Here

we have a principle of force which does not seem to be in harmony with Professor Ryan's other theories, and it would be interesting to know what scope and limits he would assign to its operation.

One might, perhaps, criticise other minor features of this excellent book, but such criticism would not detract from its great merit as a logical and lucid exposition of a most important subject, pervaded by a spirit of sweet reasonableness that charms even when it may not convince. If all the claimants to shares in distribution could have such a spirit there would be far less of conflict in the industrial world. Father Ryan is doubtless right in saying that the fundamental cause of industrial warfare is the false conception of life that prevails among both rich and poor.

"The achievement of social justice requires not merely changes in the social mechanism, but a change in the social spirit, a reformation in men's hearts. To this end nothing could be more immediately helpful than a comprehensive recognition of the stewardship of wealth, and the duty of distributing superfluous goods."

J. E. LE ROSSIGNOL.

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NEW BOOKS

CLARK, W. E. *Outlines of lectures on economics*. (New York: W. E. Clark, College of the City of New York. 1916. Pp. 41. 25c.)

EISENMAN, C. *Everybody's business*. (Cleveland, O.: Burrows Bros. Co. 1916. Pp. 166.)

A series of quotations from popular sociological literature, with running comment from the point of view of a philanthropically inclined business man.

G. B. L. A.

ELY, R. T. and WICKER, G. R. *Elementary principles of economics*. Revised edition. (New York: Macmillan. 1917.)

FINN, J. J. *Operative ownership; a system of industrial production based upon social justice and the rights of private property*. (Chicago: Langdon & Co. 1916. Pp. 301. \$1.50.)

INGRAM, J. K. *A history of political economy*. New and enlarged edition with a supplementary chapter by WILLIAM A. SCOTT and an introduction by RICHARD T. ELY. (London: A. & C. Black. 1915. Pp. xix, 315. 7s. 6d.)

This volume reproduces, apparently without change, the text of the second edition of Ingram's well-known work, but is given a new interest by the contributions of Professor Ely and Professor Scott. In the introduction Professor Ely offers a helpful estimate of Ingram's services to the science of economics, which will be useful to the younger generation of economists who have no direct, personal

knowledge of the conditions which produced Ingram's book. Professor Scott's supplementary chapter, of some sixty pages, gives an excellent account of the Austrian economists, and reviews more briefly the development of economic thought in other countries during the last twenty-five years. It would be difficult, indeed, to refer the student to a better statement of the cardinal doctrines of Menger, Wieser, Böhm-Bawerk, and Sax.

Ingram's book was never a satisfactory history of economic science; and, as time passes, its defects become more and more evident. But it served a highly useful purpose in its day, and in its present dress retains interest for all who would understand the forces that have shaped the development of economic thought.

CHARLES J. BULLOCK.

LEAVITT, F. C. *Elementary social science*. (New York: Macmillan. 1917.)

MORET, J. *L'emploi des mathématiques en économie politique*. (Paris: Giard & Brière. 1916.)

PIERSON, N. G. *Traité d'économie politique*. Translated by LOUIS SURET. (Paris: Giard & Brière. 1916. 14 fr.)

SELIGMAN, E. R. A. *Principles of economics*. Seventh edition, revised. (New York: Longmans. 1917. Pp. liv, 711.)

Economic History and Geography

The Mississippi Valley in British Politics. A Study of the Trade, Land Speculation, and Experiments in Imperialism Culminating in the American Revolution. By CLARENCE WALWORTH ALVORD. Two volumes. (Cleveland: Arthur H. Clark Company. 1917. Pp. 358; 396. \$10.00.)

This is not a history of the West. It is a study of the formulation of British policy toward the West, of the interaction of politics and finance that prevented the introduction of any one of three separate plans proposed. Dr. Alvord has here performed the double task of analyzing the complex political situation in London during the pre-Revolutionary period, and of describing at the same time the economic enterprises that affected ministerial plans.

To the British ministers the disposition of the interior wilderness gained in 1763 was the vital phase of the American problem and not the disturbances in New York and Boston. Perhaps only regard for Massachusetts sensibilities prevented the book being called "The Western Origin of the American Revolution." Why the British government failed with the problem is perfectly clear when one considers that this highly delicate task was undertaken

by a succession of ministries composed of hostile, selfish factions in league with powerful interests, and constantly threatened with disruption. In the midst of this confusion Lord Shelburne stands out as the British statesman who exerted the greatest influence on western America, not excepting William Pitt.

Able as is the political narrative yet the most interesting, illuminating chapters are those which discuss the rival capitalistic enterprises of land speculation and the fur trade (the only two lines open in the West to moneyed men), and the political manoeuvring of each for the right to exploit the great interior in its own interests. For at this time there existed a close alliance in Great Britain between "big business" and the governing class, resulting in a political immorality not unknown in the United States.

After the treaty of 1763 and especially after the British occupation of the Mississippi Valley in 1766, there occurred a striking expansion of business activities concerned with the West. Aggressive Scotch merchants began to engross the fur trade of the northern area, though wisely continuing the superior French-Canadian methods; Philadelphia firms and other trading groups attempted to make the Ohio a greater artery of western trade than the St. Lawrence or the Mississippi, but failed because the higher cost of land carriage to Pittsburgh was not offset by the better markets in the East. The economic mistake of not securing New Orleans in 1763 was now apparent, as that city remained the market toward which the commerce of the valley drifted. Endeavors to connect with the Gulf by a canal to Mobile failed. The importance of the trading groups of these days in trade, land speculation, and politics, is much greater, Dr. Alvord thinks, than historians have generally realized (vol. II, p. 202).

During these same years the eighteenth-century craze for speculation seized on the Mississippi Valley as a source of quick fortunes equal to those being made in the East Indies. Among the conspicuous "plungers" in land titles were Franklin, Washington, and Governor Dunmore of Virginia, whose western activities appear beyond doubt due to a desire to win a large landed estate in America (vol. II, pp. 182, 194). Explorers and homesteaders were frequently only the advance agents of the speculator; "the Daniel Boones of the wilderness were only the pawns of some Richard Henderson." Four fine maps based on John Mitchell's map illustrate the various colonial schemes for staking out the West. As a type of these plans and their connection with poli-

tics, a detailed account is given of the activities of Samuel Wharton, a Philadelphia business man of the Mark Hanna variety, in pushing his Vandalia project. A footnote says that a vast amount of material for a history of the acts of his company in America awaits a writer.

The land speculators worked for a government policy of westward expansion, while the Scotch fur-trading capitalists fought for the opposite plan of preservation of wilderness conditions and Indian occupation, each side advancing the particular economic theory of colonial possessions which favored its private advantage. This opposition to expansion was abetted by the alarmed investors in colonial lands east of the mountains, and somewhat by Lord Hillsborough who feared the bad effect on his Irish estates of wholesale Irish emigration to the New World. The government decision in 1768 against colonization of the interior and the extension of Quebec boundaries in 1774 to include the West, was a triumph for this latter group of interests, largely through their influence with the Scotch members of Parliament whose support was very necessary to every ministry. In fact, the Scotch fur-trading influence seems to have been a very real factor in shaping British policy towards the old Northwest for fifty years (vol. I, p. 107; vol. II, pp. 24-25).

The admirable bibliography at the end is at once a rare example of patient, profound scholarship and a treasury of information for research workers. Footnotes and index are of the same high character. The typographical excellence of the volumes deserves mention.

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Cotton as a World Power. A Study in the Economic Interpretation of History. By JAMES A. B. SCHERER. (New York: Frederick A. Stokes Company. 1916. Pp. xii, 452. \$2.50.)

This volume is divided into seven books and seventy-five chapters, of which the shortest contains only twenty lines. In the first book are briefly described the earliest cultivation and manufacture of cotton in the Orient, and its transition to Europe, and finally to England. In the second book ten chapters are devoted to the Industrial Revolution and its results, much of this material being biographical rather than technical as might have been expected from the president of a college of technology. In book

three the scene shifts to the United States, and the invention of the cotton gin is described. The next three books deal respectively with the slavery controversy, the Civil War, and the rise of cotton factories in the new South. The seventh and final book is entitled *Cotton a World Trade*; but contains a variety of topics from preparedness to evolution.

The main thesis of the volume seems to be that cotton, by reason of its importance and the fact that its production is confined to a comparatively small area, has exercised a distinct and even dominating influence upon the destinies of nations. It formed the economic basis of India; its advent into England transformed that country from an agricultural nation to a manufacturing nation; and its culture in the United States changed the development of the South, gave a new lease of life to the system of slavery, and led to civil war. Today it again takes an important part in the world's commerce, and even in the European war it plays a deadly role through its use as gun cotton.

This is indeed economic interpretation of history. Such interpretations are always interesting, if not entirely convincing. According to one economic historian the center of the world's civilization has shifted with the movement of the precious metals; another has found the explanation in the development of improved transportation; and now President Scherer sees in cotton the cause of the westward movement of human progress. The very multiplicity of these unitary explanations shows that perhaps the problem is more complex than any one of the writers admits. To the reviewer such a simplification even of the economic factors involved does not commend itself. A *reductio ad unum* becomes a *reductio ad absurdum*.

The author has conceived the story of cotton as an epic, but has scarcely risen to its highest possibilities. The work is too long, there are too many digressions, and it is broken up into too small fragments. It bears evidence of having been written at intervals. But in spite of all these shortcomings President Scherer has succeeded in writing an interesting book, which is rendered the more readable by reason of an attractive style.

ERNEST L. BOGART.

University of Illinois.

NEW BOOKS

ACLOQUE, G. *Les corporations, l'industrie et le commerce à chartres, du onzième siècle à la Révolution.* (Paris: Picard. 1917.)

- CARQUEJA, B. *O povo Portugez. Aspectos sociais e economicos.* (Oporto: Lella & Trinao. 1916. \$1.60.)
- CUNNINGHAM, W. *The progress of capitalism in England.* (London: Cambridge Univ. Press. 1917. Pp. 155. 3s.)
- DIBBLEE, G. B. *Germany's economic position and England's commercial and industrial policy after the war.* (London: Heinemann. 1917. Pp. 108. 1s.)
- DUTT, R. C. *The economic history of India in the Victorian Age.* Fourth edition. (New York: Dutton. 1916. Pp. 628. \$2.50.)
- FURNISS, H. S., editor. *The industrial outlook; being essays on construction by various authors.* (London: Chatto & Windus. 1917. 3s. 6d.)
- GROTIUS, H. *The freedom of the seas. Or the right which belongs to the Dutch to take part in the East Indian trade.* Translated with a revision of the Latin text of 1633 by R. VAN D. MAGOFFIN. Edited with introductory note, by JAMES BROWN SCOTT. (New York: Oxford Univ. Press. 1916. Pp. xv, 83. \$1.)
- GUYOT, Y. *Les causes et les conséquences de la guerre.* (Paris: Alcan. 1917. 3.50 fr.)
- HARPELL, J. J. *Canadian industry, commerce, and finance.* (Montreal: Industrial & Educational Press. 1915. Pp. 386.)
- HIGGINSON, E. *Alaska. The great country.* New edition. (New York: Macmillan. 1917. \$2.50.)
- KAHO, J. F. *Note book for constructive work in commercial geography.* (Topeka: Kans. Hist. Pub. Co. 1916. Pp. 120, illus. 35c.)
- MUKERJEE, R. *The foundations of Indian economics.* (New York: Longmans. 1916. Pp. xxvi, 515. \$3.)
- OGG, F. A. *Economic development of modern Europe.* (New York: Macmillan. 1917.)
- PEIXOTTO, E. *Our Hispanic Southwest.* (New York: Scribner. 1916. Pp. xx, 245. \$2.50.)
- PERET, R. *La population, le budget, la fortune et la dette publique de la France, de ses alliés et de ses ennemis avant la guerre.* (Paris: Alcan. 1917.)
- REID, W. A. *Bolivia, the heart of a continent.* (Washington: Gibson Bros. 1916. Pp. 53. Gratis.)
- THÉRY, E. *Les problèmes économiques de la guerre, études économiques et financières.* (Paris: Belin. 1917. 3.50 fr.)
- WATERMAN, T. T. *Bandelier's contribution to the study of ancient Mexican social organization.* (Berkeley, Cal.: Univ. of California. 1917. Pp. 249-282. 35c.)
- WESTERGAARD, W. *The Danish West Indies.* (New York: Macmillan. 1917. \$2.50.)

WEYL, W. E. *American world policies*. (New York: Macmillan. 1917. \$1.50.)

The American year book. A record of events and progress. 1916. Edited by FRANCIS G. WICKWARE. (New York: Appleton. 1917. Pp. 862.)

Includes the following chapters: "Public resources and public works"; "Public services," by Richard C. Harrison; "Economic conditions and the conduct of business," by S. S. Huebner and Wesley C. Mitchell; "Public finance, banking, and insurance," by C. C. Williamson, Ray B. Westerfield, Wendell M. Strong, and S. S. Huebner; "Social and economic problems"; "Labor and labor legislation," by John B. Andrews and Irene Osgood Andrews; "Agriculture, horticulture, forestry, and fisheries"; "The mineral industries"; "Manufactures," by W. M. Steuart and Walter F. Rogers; "Trade, transportation, and communication," by Grover G. Huebner and Robert Riegel.

Blue book of Salvador. Text in English and Spanish. (San Salvador: Latin American Publicity Bureau. 1916. Pp. 352, xli.)

Early records of the city and county of Albany and Colony of Rensselaerswyck. Volume II. Deeds 3 and 4, 1678-1704. (Albany: Univ. of State of New York. 1916. Pp. 438.)

Economic notes on Brazil. Second edition. (Rio de Janeiro: Minister of Agriculture, Industry and Commerce. 1916. Pp. 93. Gratis.)

Facts about Georgia. (Atlanta: Georgia Chamber of Commerce. 1917. Pp. 280, illus. \$1.)

Mexico, a brief record of the economic conditions of the republic in their relation to the outside world. (New York: Mechanics & Metals National Bank. 1916. Pp. 46.)

WERTHNER, W. B. *How man makes markets; talks on commercial geography.* (New York: Macmillan. 1917. Pp. ix, 200. 40c.)

The Russian yearbook, 1916. (New York: Moody Mag. & Book Co. 1917. Pp. 800. \$5.)

Die wirtschaftliche Annäherung zwischen dem Deutschen Reich und seinen Verbündeten herausgegeben im Auftrage des Vereins für Socialpolitik. (Leipzig: Duncker & Humblot. 1916. Pp. xiv, 403; x, 496.)

Agriculture, Mining, Forestry, and Fisheries

Agricultural Economics. A Selection of Materials in which Economic Principles are applied to the Practice of Agriculture. By EDWIN G. NOURSE. (Chicago: The University of Chicago Press. 1916. Pp. x, 896. \$2.75.)

Professor Nourse calls this a "composite textbook." It is composed of three elements: (1) short introductions by the editor pre-

fixed to each chapter, (2) excerpts from standard textbooks on economic theory, and (3) source materials. By such a combination the editor has sought to avoid on the one hand the incoherence and confusion characteristic of many volumes of "readings," and on the other the hard and fast treatment often found in textbooks. Instead of constructing "a broad, smooth highway of thought, down which the student whizzes to his appointed destination without getting much benefit from his journey," he has sought to provide opportunity "to tarry and visit, to wander back and forth, to explore the country and learn the whole region. . . ."

The "materials," forming the bulk of the volume, are grouped into seventeen chapters in a topical arrangement corresponding to that ordinarily found in systematic treatises of economic theory. These chapters fall into three divisions treating (1) the factors in the production of agricultural wealth, (2) the conditions influencing price determination and the methods of marketing farm products, and (3) the distribution of the income from the industry into rent, interest, wages, and profits. In this last group is a chapter on Rural Credits. In an emphatic position after the introductory historical chapter is a discussion of Consumption.

The yearbooks and farmers bulletins, of the United States Department of Agriculture, census publications, bulletins of state agricultural experiment stations, and county surveys have been liberally drawn upon. Besides this source material there are reprinted articles from the economic journals and excerpts from treatises on farm management and agricultural economics. In each chapter the first few pages are from such economists as Marshall, Taussig, Seager, and Seligman, and in some cases from the writers of the classical school. Thus as an introduction to the discussion of the problems of each chapter there is presented a statement of the general principles on the basis of which the problems may be solved.

The editor has succeeded in furnishing variety in his selections without sacrificing substantiality. He presents in well-systematized form a wide range of up-to-date facts concerning the agricultural industry of the United States, accompanied by carefully scientific and popularly interesting discussions of the meaning of these facts.

The introductions by the editor are not uniformly valuable. They are not designed to reconcile the theories propounded by the authors quoted, nor to give an authoritative interpretation of the

whole. In some places Professor Nourse has made a stimulating contribution, as for instance in Selection 120, *The Possibilities of Coöperation*, but in the majority of cases he is content to be expository rather than argumentative. His style is forceful and clear; the reader is apt to regret that the editor has not contributed more.

Chapter 1, *The Emergence of the Problem of Agricultural Economics*, is disappointing. The editor's purpose was to trace the development of commercial agriculture out of self-sufficient farming. Here was an opportunity to teach students something about the history of agriculture in the United States, which in itself furnishes instructive illustrations of all the important steps in the commercialization of the industry. Instead, some thirty pages are devoted to the agriculture of primitive peoples and of classical antiquity, twenty more to medieval agriculture and the manor system. In the remainder of the chapter the best material on the history of American agriculture has not been utilized.

Agricultural economics is a broader subject than farm management. It is not concerned only with teaching the individual farmer how to make the largest net profit. It is concerned also with those broad societal problems involving the place of the agricultural population and their industry in the national economy. The editor has kept well in the foreground the social aspect of such matters as the standard of living of the rural population and the defects of the labor force both in quality and quantity. In so doing he has justified his advocacy of the teaching of agricultural economics in every institution which aims to give a liberal education.

PERCY WELLS BIDWELL.

Sheffield Scientific School, Yale University.

NEW BOOKS

- BENSON, O. H. and BETTS, G. H. *Agriculture and the farming business*. (Indianapolis: Bobbs-Merrill. 1917. Pp. 778. \$3.50.)
- DENIS, L. G. and CHALLIES, J. B. *Water powers of Manitoba, Saskatchewan, and Alberta*. (Ottawa: Commission of Conservation, Canada. 1916. Pp. 334.)
- KAHO, J. F. *Note book for constructive work in commercial geography*. (Topeka: Kans. Hist. Pub. Co. 1916. Pp. 120, illus. 35c.)
- LONG, J. R. *A treatise on the law of irrigation, covering all states and territories*. Second edition. (Denver, Colo.: W. H. Courtwright Pub. Co. 1916. Pp. xiii, 626. \$7.50.)

- MACKENNA, J. *Agriculture in India*. (Calcutta: Supt. of Gov. Prtg. 1915. Pp. 106. 4 As.)
- PICARD, H. K. *Copper from the ore to the metal*. (London: Pitman. 1916. Pp. ix, 130, illus. 85c.)
- ROUSH, G. A., editor. *The mineral industry; its statistics, technology, and trade during 1915*. (New York: McGraw-Hill Bk. Co. 1916. Pp. xx, 241. \$10.)
- DE SCHMID, H. S. *Feldspar in Canada*. (Ottawa: Dept. Mines. 1916. Pp. viii, 125, xxiii.)
- TICHENOR, W. C. *Farm contracts between landlord and tenant*. (Lebanon, O.: Author. 1916. Pp. xii, 245.)
- TURNOR, C. *Our food supply*. (New York: Scribner. 1916. Pp. ix, 171.)
- WERTHNER, W. B. *How man makes markets; talks on commercial geography*. (New York: Macmillan. 1917. Pp. ix, 200. 10c.)
- WILSON, L. M., compiler. *Petroleum and natural gas; a short treatise on their early history, origin, distribution, accumulation and surface indications*. (Houston, Tex.: L. M. Wilson. 1916. Pp. 64. 65c.)
- WOLSELEY, VISCOUNTESS. *Women and the land*. (London: Chatto & Windus. 1916. Pp. xi, 230.)
- The extension service of the Massachusetts Agricultural College. What it is and what it does for the commonwealth*. (Amherst, Mass.: William D. Hurd. 1917. Pp. 7.)
- Plantation farming in the United States*. (Washington: Bureau of the Census. 1916. Pp. 40. 10c.)
- Preliminary report of the mineral production of Canada during the calendar year 1916*. (Ottawa: Dept. Mines. 1917. Pp. 25.)

Manufacturing Industries

- History of Manufactures in the United States, 1607-1860*. By VICTOR S. CLARK. With an introductory note by HENRY W. FARNAM. (Washington: Carnegie Institution of Washington. 1916. Pp. xii, 675.)

To say that Mr. Clark's book is the best in its field would be faint praise, for there is only one other that covers the field, and that was written nearly sixty years ago. When the Carnegie Institution included manufactures in the general plan of its Contributions to American Economic History, it hoped to fill a yawning gap in the organized and systematic knowledge of our country's past. Professor Farnam tells us that Mr. Clark has been in charge

of the work for a decade, bringing to it a valuable training and broad preparation. That he has been able to carry it no further than the Civil War is due to the enormous growth of manufacturing since that time and the vast accumulation of materials relating to it. The materials for the first two and a half centuries of our industrial growth, though naturally scantier than for the later period, are yet abundant enough to require a very great expenditure of time and labor.

It is difficult to write economic history without showing a predilection for any public policy, a partiality for any social class or branch of industry. But Mr. Clark's book is singularly free from bias or prejudice. He does not omit description of some political and social movements and endeavors; but he leaves us with the impression that, clamorous and exciting as these have been, their influence was relatively slight, and that the forces really determining our industrial growth have been strictly economic. Indeed, he wishes his book to be considered the work of an economist rather than that of a historian; his purpose is "not solely to present a picture of the past, but to interpret selected historical data as illustrating phases of economic progress"; and to that end he adopted not a narrative and chronological but a "topical method" of presenting his subject.

The "topics" that he selects for methodical treatment are six in number: (1) foreign influence, (2) domestic policies and legislation, (3) the influence of natural resources, (4) transportation and markets, (5) capital, profits and wages, (6) the technology and organization of manufactures. He discusses these topics first for the colonial period and afterward for the nineteenth century. In addition there is a brief introductory chapter on the European background, a review of contemporary accounts of colonial manufactures, a description of the propaganda of home manufactures during the Revolution; and the three concluding chapters give the distribution and volume of manufactures, and sketch the history of the manufacture of metals and textiles. To some readers a different selection and arrangement of "topics" might commend itself, but those of the author are not illogical, and afford a framework for presenting all the information he has gathered.

The quantity of facts assembled in this framework is very great, for the writer's researches have been wide and laborious. But they are not always interpreted, and sometimes several pages of specific facts are given that have little apparent significance. The reader rather gets the impression that the author was unwilling to

omit from his book any authentic fact, whether it was informing or not. Thus six pages with about a hundred citations are devoted to "manufacturing profits" in the nineteenth century, but one struggles in vain to find the significance of the confusing mass of names and figures that are given. Indeed, if they have a meaning the author himself does not know it, for he reaches the erratic conclusion that "Necessarily capital earned as much in manufactures as in banking and commerce, and in other branches of production; otherwise it would not have been invested." He closes the discussion by saying that during a decade \$20,000,000 of New England manufacturing capital earned 10 per cent, which "is probably as good a clue in this direction as we possess." If this is true, the reader might have been spared the preceding tedious enumeration of names, places, and figures. But strain on the reader's attention is not the chief objection to burdening the text with such material; more important is the likelihood that it will lead to false conclusions. Thus in speaking of intercolonial trade the author gives about five pages of statistics and examples, a number of them merely sporadic and anomalous, that convey, in the reviewer's judgment, an exaggerated impression of the activity of this market for home manufactures. This defect in presentation was clearly shown in the work of about twenty graduate students, who used the book during the present college session in connection with a course offered by the reviewer on the growth of American industry and commerce. It might have been much ameliorated by transferring to footnotes any facts not essential to the argument.

As a rule the sanity and conservatism of the author's conclusions and the evidence adduced to support them leave nothing to be desired. That there are occasional exceptions is not unnatural. Thus, except for a very short time, it was not the Navigation acts but the prevailing credit system that compelled colonial tobacco planters to sell in a monopoly market. Again, it is a mistake to say that until the Civil War, in the textile industry "the supply and distribution of labor remained as it had been since 1820." Furthermore, the reviewer doubts the statement that "in producing durable goods for ordinary uses . . . the equipment of American mills and factories was not excelled." The spirit of the age demanded speed of production rather than durability. So swift was the growth of cities, the change of habitation and the progress of invention that one decade frequently saw the work

of the previous decade swept away and substituted by new creations. In consequence, what the consumer demanded was not apt to be durability of materials and processes; he wanted a thing adapted to meet an immediate and temporary need, a thing that could be exploited and used up before the progress of invention and the appearance of new wants made it expedient to abandon it. What chiefly amazed European travelers, especially Germans, was the speed with which the American workman turned off his work. American tools and processes were mainly adapted to that end, and work was rushed to completion with a rapidity that usually prevented the durability that was demanded in the Old World.¹

If the reviewer may be pardoned yet another illustration of the author's occasional inaccuracy, he ventures to disagree with the assertion that "the operative population remained of native stock, with some recruits from Great Britain and Ireland." During the forties the labor supply was already changing rapidly. By 1854 half the operatives in the Lowell mills are said to have been Irish; and at Fall River six years later the British and Irish workers were a majority. In 1858, 70 per cent of all the employees of the Cambria Steel Company were Welsh. At that time a molder of native birth was hard to find anywhere in America. In 1870, for the country as a whole, natives composed only 61 per cent of the textile operatives and about 56 per cent of those in iron and steel works. This was, it is true, a decade after the period described by the author, but it indicates that "some recruits" hardly expresses the degree to which we were fulfilling Hamilton's prediction that for manufacturing labor we should "trade upon a foreign stock." We could wish that the author had given fuller treatment to the important question as to whether immigration has "displaced" American labor in manufacturing or has merely "replaced" it, as Americans rose to higher pursuits.

Mr. Clark's book is far from being the "final word" on his subject, but it is the most considerable contribution to it that has ever been made. He has brought evidence for many beliefs and organized much information already current among scholars, and he has added no little that is new. That the reader may find treated inadequately or not at all some phases of industrial growth particularly interesting to himself, should not detract from his

¹ Cf. Büchele, *Land und Volk der Vereinigten Staaten*; Jörg, *Briefe aus der Ver. Staaten*; Fröbel, *Die Deutsche Auswanderung und ihre Culturhistorische Bedeutung*; et al. plur.

appreciation of the discriminating judgment and scholarly efficiency with which the author has performed his work. The book will long remain indispensable to students and investigators and will give invaluable aid to all that are interested in the economic development of this country.

THOMAS W. PAGE.

University of Virginia.

NEW BOOKS

CHERRINGTON, P. T. *The wool industry. Commercial problems of the American woolen and worsted manufacture.* American industries; studies in their commercial problems, no. 1. (New York: A. W. Shaw Co. 1916. Pp. xvi, 261. \$2.50.)

To be reviewed.

TRIBOT-LASPIÈRE, J. *L'industrie de l'acier en France; simple exposé technique et économique.* (Paris: Vuibert. 1916. Pp. vii, 355, illus. 3 fr.)

Census of manufacturers: 1914. Vermont. (Washington: Bureau of the Census. 1917. Pp. 25.)

Transportation and Communication

State Regulation of Railroads in the South. By MAXWELL FERGUSON. Columbia University Studies in History, Economics and Public Law, Vol. LXVII, No. 2. (New York: Longmans, Green and Company. 1916. Pp. 228. \$1.75.)

This monograph is preliminary to a larger study dealing generally with the regulation of railroads in the South and its scope is confined to states east of the Mississippi and south of the Ohio. Thus, Maryland, Missouri, Arkansas, and Texas are not considered, but the omission is not important as their experience furnishes nothing unusual in railway control.

The larger part of the present study is given over to a description of commission regulation, the problem in each state being separately discussed. Only introductory are the first four chapters on Charters, Early General Laws, Constitutional Provisions Affecting Railroads, and Recent General Railway Legislation; but these embody material which is as interesting as any in the history of railroad development in the South, which has never been adequately treated, and which might well be returned to when Mr. Ferguson publishes his larger work.

In granting their first charters, the southern states attempted

to regulate tariffs, permit the coöperation of the various companies in the transportation of freight and passengers, and require safe and prompt service. Almost immediately there were express prohibitions of the construction of competing lines, and the author regrets that these "were not more numerous and stringent." Maximum rates were frequently prescribed, but these were generally so high that compliance was no burden; publicity was but seldom insisted upon, and discrimination rarely mentioned. The powers reserved to the states were the usual ones—the right to regulate rates and to purchase the road after a specified number of years; and in order to encourage construction there were frequent exemptions of the property from taxation.

Mr. Ferguson's history of this early period is sketchy; there seem to be no general tendencies of a significant character, but he lays the basis for the subsequent discussion, and after a brief survey of early legislation which was "voluminous" but "disappointingly incomplete," he shows that inflexible statutes were not to the best interests either of the carriers or of the people. Boards were soon appointed to administer the state internal improvement funds and they took over various duties, such as receiving reports in connection with the railways. The first railroad commission was established in Virginia (1877). It was weak, with powers and duties similar to those of the Massachusetts board. Similar action was taken by several other states and the commissions served some useful purpose, but the first mandatory commission was instituted in 1879 and Virginia did not change until 1902. After the movement was started its "home was chiefly in that [southern] portion of the Union."

Surveying the present commission situation in the South, the author finds that political considerations in the choice of men are still too important, the offices being elective in all the states except Virginia and West Virginia. "Even now," he says, "the people of the South are still too much inclined to think that if a man is of requisite age and is morally responsible, he is fully qualified to hold any public office" (p. 198). The term of office is generally too short—four states limiting the commissioners to a term of four years—but recent changes have been encouraging. Especially deplorable is the absence of any technical requirements for the commissioners. Only four states provide for the presence on the commission of any experienced railroad men; appropriations for expenses and salaries are entirely too small; in some cases sufficient

authority has not been granted, and too often rate making is not scientific but mere guess work. In the minds of some of the commissioners, Mr. Ferguson thinks, the uppermost thought has been "so to lower intrastate rates in comparison with corresponding interstate rates and the intrastate rates of other states as to favor their own jobbers and producers at the expense of those of adjoining states. The consequence is a discouraging lack of consistency in the policies of the different states." On the whole, the author's opinion is that conditions in the South appear to be not so good as in other sections of the country. He advocates an extension of the federal authority, for the Interstate Commerce Commission has been both expert and intelligent. "Regulation by the southern commissions has been neither."

Within its restricted scope the present study is admirably done; but it is obviously only preliminary to a real economic study of railroad regulation in the South. It is to be hoped that Mr. Ferguson will soon be able to publish this larger work, which will deal with the growth of the principal railroad systems, intercorporate relations, special rate problems, and state and federal regulation. The present study traces the development of state interference primarily from the standpoint of administration.

LINDSAY ROGERS.

University of Virginia.

NEW BOOKS

DOOLITTLE, J. R., editor. *The romance of the automobile industry.* (New York: Klebold Press. 1916. Pp. xiv, 460, plates. \$10.)

FRANKFURTER, F. *A selection of cases under the Interstate Commerce act.* (Cambridge: Harvard Univ. Press. 1915. Pp. xi, 706.)

In a prefatory note Professor Frankfurter calls attention to the recent greatly increased importance of the Interstate Commerce act, but the applicability of this case book to use in a college course would seem to depend upon a high degree of specialization which would cause separate treatment of questions that are already given tolerably adequate treatment under the heads of constitutional law, the law of common carriers, administrative law, and public service corporations. The selection of cases is admirable and the editing—so far as restatement of the facts and abridgment of opinions are concerned—is well done. Economists will find the collection a convenient one for ascertaining the rules of law without going to the actual reports. All the important questions under the act are given representation. Readers other than students who use the volume as a case book will notice the absence of an index.

L. R.

- GRAHAM, L. *Argentine railways; a review of their position, conditions and prospects.* (New York: Renskorf, Lyon & Co. 1917. Pp. 36.)
- JACKMAN, W. J. *Traffic, interstate commerce and transportation.* (New York: Institute of Business and Finance. 1916. Pp. 413. \$3.)
- HELPS, E. M., compiler. *Selected articles on government ownership of railroads.* Third and revised edition. (White Plains, N. Y.: Wilson. 1916. Pp. 37, 201. \$1.)
- SMITH, A. D. *Rates of postage. An historical and analytical study.* (London: Allen & Unwin. 1917. 16s.)
- WYMOND, M. *Government partnership in railroads.* (Chicago: Wymond & Clark. 1917. Pp. 183. \$1.50.)
- Dues and port charges on shipping throughout the world; a manual of reference for the use of shipowners, shipbrokers and shipmasters, comprising Urquhart's "Dues and charges in foreign and colonial ports" (fifteenth edition) and Turnbull's "Dock and port charges for the United Kingdom" (eleventh edition).* Three volumes. (New York: C. S. Hammond & Co. 1916. \$30.)
- List of publications pertaining to government ownership of railways.* (Washington: Bureau of Railway Economics. 1917. Pp. 100.)
- Pennsylvania railroad system.* (Buffalo: Matthews-Northrup. 1916. Pp. 80.)
- Statistics of railways, 1905-1915, United States.* (Washington: Bureau of Railway Economics. 1916. Pp. 57.)
- Summary of railway returns for the fiscal year ending June 30, 1916.* Miscellaneous series, no. 27. (Washington: Bureau of Railway Economics. 1917. Pp. 24.)

Trade, Commerce, and Commercial Crises

Caribbean Interests of the United States. By CHESTER LLOYD JONES. (New York: D. Appleton and Company. 1916. Pp. viii, 379. \$2.50.)

In *Caribbean Interests of the United States*, Professor Chester Lloyd Jones, of the University of Wisconsin, draws attention to a region to which the recent acquisition by the United States of the Danish West Indies lends a special interest. It is more than likely that, apart from Cuba, Hayti, and Porto Rico, most of the islands and countries washed by the Caribbean Sea are empty names to most Americans, excepting for such as have business relations in that part of the world or the much smaller number of those who, in recent years, have discovered in its genial climate a grateful refuge from the rigorous winters of the North. Yet,

without the sugars from Cuba and Porto Rico, cocoa from Trinidad and San Domingo, coffee from Central America and the Caribbean littoral of South America, to say nothing of the banana and other tropical products, the average American table would offer something approaching a Barmecide feast.

In the volume under notice Professor Jones describes tersely but comprehensively the resources and activities of each component part of the Caribbean region. The import and export trade of each is tabulated and analysed in an illuminating and eminently readable manner. The author has avoided technicalities most successfully and his facts are presented concisely and entertainingly.

The first half of the book is devoted to short, lucid accounts of the various Caribbean units, each being treated individually and in turn. The principal crops are noted and Professor Jones points out the extent to which each island or country has become dependent on a single crop more or less peculiar to itself. The inherent weakness inseparable from this condition is that distress, if not disaster, accompanies the failure of a season's crop, while a superabundant harvest, on the other hand, by the resultant decline of prices, brings its own obvious disadvantages. It is gratifying to learn that Porto Rico and Cuba, the sections most closely associated with the United States, are at the same time the most prosperous; and the statistics of the economic advances made in these islands since their surrender by Spain are impressive. The British and French colonies, on the other hand, have been retrograding steadily, ever since the development of the sugar beet in Europe revolutionized the sugar industry of the world. We learn with pleasure, however, that the present European war, which has worked such hardships on the parent nations, has treated these old colonies leniently and, under present conditions, they are enjoying at least a share, temporary though it be, of their pristine Georgian and early Victorian prosperity, when the possession of an estate in "the Jamaicas" was esteemed the hallmark of opulence. "For years the wealthiest of British subjects was a Jamaican."

There is an instructive chapter on the oil resources of the Caribbean and another on the banana trade; and from the latter we learn that "we now import annually about 65 bananas for each man, woman and child in the United States." The steady growth of this trade is explained and the early history of its develop-

ment succinctly related. Professor Jones has also a very readable chapter on the Panama Canal and he reviews most of the arguments for and against its fortification. A further chapter is devoted to the Haitien Protectorate. These chapters might well be printed separately in pamphlet form, as they contain matter of permanent interest and are entertaining as well as instructive.

It is, however, to the political conditions in the Caribbean, in its relation to the United States, that the author more particularly directs our attention. He proves convincingly that this country, politically and economically, has already acquired a predominant position in Caribbean affairs and that nothing must be allowed to interfere with our ascendancy. With this point of view his readers will be entirely in accord. Now that St. Thomas has passed under the dominion of the Stars and Stripes, it is probable that nothing, so far as can be foreseen, will arise in the future to challenge seriously this hegemony. The only foreign Power predisposed to predatory incursions in this hemisphere inimical to the United States is already practically removed as a disturbing factor and its power for harm definitely obliterated.

Sufficient light is thrown by the author on Caribbean business matters to show that American "big interests" have already secured a firm and, we gather, a salutary grip on the entire region, and as political conditions on the mainland become more and more stable, this is altogether likely to become firmer. The author supplies many reasons for his belief that further development can best be secured by strong influential corporations with ample capital and wide business horizon and his arguments are, in the main, convincing.

The British and French colonies are likely to maintain their present political status for some time to come and, indeed, there is said to be on foot, at the present time, a movement to bind the British Islands, through a firmer economic union with Canada, more closely to the British Empire, but even there the eventual tendency must be more and more toward the United States, particularly if the Washington government should develop a "comprehensive tariff policy" in the West Indies.

The relative geographic positions of the United States and the Caribbean give the former a big and obvious advantage, though, as is clearly shown, the economic success of this country is directly due no more to propinquity than to the courage of American investors in embarking their funds in regions which, for various

reasons—instability of government principally—the great financial nations of Europe have approached with caution. We learn, for instance, that \$200,000,000 of American money is already invested in the American tropics; and this is only a beginning.

One gathers, between the lines, in reading the concluding chapters of the book, that Professor Jones deprecates, while reluctantly recognizing, a tendency on the part of the Central American countries to regard with a measure of alarm the ever increasing influence of their giant neighbor to the north and, indeed, we have all heard more or less of this instinctive feeling on the part of these small and unprotected republics; but when we review their attitude during the last few weeks, when country after country in South America has hastened to place itself in sympathetic alignment with the United States on the occasion of our entering into the European war, it is difficult to believe that any of them can honestly harbor real dread of an encroachment on their rights or an attack on their autonomy, or indeed expect anything but single-minded aid and protection whenever and as often as either may be called for.

Professor Jones has written a book of the greatest value to any one interested in the subject of the Caribbean countries and this should mean all Americans who watch with pride their country's progress, and are concerned in seeing it achieve and maintain its proper position as the dominant economic and political power of the Western Hemisphere.

J. F. FOWLER.

NEW BOOKS

- BELLET, D. *Le commerce allemand, apparences et réalités.* (Paris: Plon. 1916. Pp. 312.)
- EDER, P. J. *Foreign and home law. Its main points of contact with our foreign trade. Being the tenth unit of a course in foreign trade.* (New York: Business Training Corporation. 1916. Pp. 160.)
- HAUSER, H. *Germany's commercial grip of the world. Her business methods explained.* Translated by M. EMANUEL. (New York: Scribner. 1917. Pp. 259. \$1.65.)
- NAVARRINI, U. *Trattato teorico-pratico di diritto commerciale.* Two parts. (Torino: Bocca. 12 l; 15 l.)
- PEDDIE, J. T. *On the relation of imports to exports.* Second edition, enlarged. (London: Longmans. 1917. Pp. 172. 3s. 6d.)
- POLAC, L. *Notre commerce extérieur d'après guerre.* (Paris: Dunod & Pinat. 1917. Pp. 288. 4.50 fr.)
- RAESTAD, A. C. *Handelspolitik.* (Kristiania: J. W. Cappelen. 1914. Pp. 187.)

SNOW, C. D. *Factors in trade building. Being the twelfth unit of a course in foreign trade.* (New York: Business Training Corporation. Pp. 143. 1916.)

Review of the trade of India in 1915-1916. (Calcutta: Department of Statistics, India. 1916. Pp. 112, vi.)

List of references on embargoes. (Washington: Superintendent of Documents. 1917. Pp. 44.)

Accounting, Business Methods, Investments, and the Exchanges

NEW BOOKS

ACHESON, A. *Trade-mark advertising as an investment.* (New York: New York Evening Post. 1917. Pp. 46. \$1.)

ATWOOD, A. W. *How to get ahead; saving money and making it work.* (Indianapolis: Bobbs-Merrill. 1917. Pp. 277. \$1.25.)

BLACK, W. L. *Supply and demand; or, A comparison of our exchange system of dealing in futures and hedging with our protective tariff system as a means for developing and marketing American agricultural products.* (New York: Parsons & Co. 1917. Pp. 39.)

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- DUDLEY, W. A. *Finance and life insurance; a handbook of tables and formulae, with rules and explanations*. (Mexico, Mo.: Missouri Prtg. & Pub. Co. 1916. Pp. 227. \$5.)
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- FEGER, P. C. *Business law*. (Philadelphia: Peirce School. 1917. Pp. vi, 252.)
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- RACINE, S. F. *Guide to the study of auditing.* Second edition, revised and enlarged. (Seattle: Western Institute of Accountancy, Commerce, and Finance. 1916. Pp. 74. \$1.25.)
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ROSENBAUM, S. *Commercial arbitration in England*. (Chicago: Chicago Legal News Co. 1916. Pp. 71.)

ROTH, F. *Forest valuation*. Michigan manual of forestry, vol. II. (Ann Arbor: The author. 1916. Pp. 171. \$1.50.)

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STETSON, F. L., BYRNE, J., and others. *Some legal phases of corporate financing, reorganization and regulation*. (New York: Macmillan. 1917. Pp. ix, 389. \$2.75.)

To be reviewed.

THORNE, W. V. S. *Hospital accounting and statistics*. Third edition. (New York: Dutton. 1917. \$1.25.)

VANDERBLUE, H. B. *Railroad valuation*. Hart, Schaffner & Marx Essays, XXIII. (Boston: Houghton Mifflin. 1917. Pp. xiii, 222. \$1.50.)

To be reviewed.

VIDAL, E. *La bourse des valeurs mobilières*. (Paris: Cote de la Bourse et de la Banque. 1917. Pp. 88.)

WOODS, C. E. *Unified accounting methods for industrials*. (New York: Ronald Press. 1917. Pp. 484. \$5.)

To be reviewed.

Bonds exempt or exemptible from the personal property tax under the mortgage tax law of the state of New York. (New York: Guaranty Trust Co. 1916. Pp. 19.)

Business man's encyclopedia. Three volumes. (Chicago: A. W. Shaw Co. 1917.)

Code of ethics and policies, Associated bureaus; clerical, litigation, adjustment, inspection, medical, safety, welfare. Pittsburgh railways company. (Pittsburgh, Pa.: Murdoch, Kerr & Co. 1916. Pp. lxxxi.)

Fitch atlas of railroad mortgage maps. (New York: Fitch Pub. Co. 1916. Pp. 29. \$35.)

Hall of Records power plant. Report and discussion of physical test and costs of operation and maintenance. (New York. 1916. Pp. x, 673.)

Interest tables, basis: days 360 and 365 per annum, and other useful information. (New York: H. K. Brewer & Co. 1916. Pp. 64. 75c.)

Proceedings of the twentieth annual convention of the American Electric Railway Accountants' Association. (New York: The Association. 1917. Pp. 254.)

Proceedings of the tenth and eleventh annual conventions of the National Association of Comptrollers and Accounting Officers. (Detroit, Mich.: John W. Eisman, Secretary. 1916.)

Property accounting. Second edition. (Washington: Dept. Commerce. 1916. Pp. 9.)

Manual of accounting, reporting and business procedure of the city and county of Philadelphia. (Philadelphia: John M. Walton, City Controller. Pp. 218.)

Year-book of the Institute of Accountants in the United States of America (including the American Association of Public Accountants). (New York: The Institute. 1916. Pp. 255.)

Uniform classification of accounts for municipal water utilities, prescribed by Bureau of Inspection and Supervision of Public Offices of Washington, effective January 1, 1916. (Olympia, Wash.: State Auditor. 1916. Pp. 103.)

Capital and Capitalistic Organization

Corporation Finance. Part II. Distributing Securities Reorganization. By HASTINGS LYON. (Boston: Houghton Mifflin Company. 1916. Pp. vii, 316. \$2.00.)

Students of corporation finance will welcome the appearance of a new work by Hastings Lyon. The suggestive treatment of a few topics in an earlier volume (entitled *Capitalization*) has stimulated a desire for similar discussion of other phases of corporate financing. *Capitalization* (now called *Corporation Finance, Part I*) dealt with the promotion of enterprises, the use and significance of the numerous types of securities for the new corporation as well as for its promoters, stockholders, and creditors. The new volume (*Corporation Finance, Part II*) considers the corporation as a going concern and discusses financial problems. Three main topics are treated, the raising of additional funds or the distribution of securities, corporate income, and reorganization.

The first half of the book is devoted to a consideration of the ways and means of raising additional funds for the capital account. Chapter 1 gives a more satisfactory discussion of the method of raising funds through direct appeal to the stockholder than is to be found elsewhere. The second chapter, upon the raising of funds through banking houses, includes a good description of the character and functioning of investment bankers in connection with the distribution of securities issues. The following section affords a detailed account of syndicate organization and operation which throws additional light upon a number of points, among which may be mentioned the distinction between

joint accounts and underwritings, divided and undivided carrying of syndicate accounts, the liabilities of participants, and the apportionment of gains and losses in syndicate transactions. The discussion of listing upon the stock exchange consists mainly of a briefly annotated abstract of applications for listing stocks and bonds upon the New York Stock Exchange.

The short general discussion of corporate income, the second main topic, is without doubt the least satisfactory portion of the whole work. Nevertheless, the treatment of the income of a holding company (ch. 6) and the analysis of the peculiarities and significance of holding company income statements is a welcome contribution.

The subject of reorganization, occupying the last third of the book, is introduced by an excellent hypothetical example of the development of a railroad system, illustrating both the manner of financing the creation of such a system and the origin of the complexity of security issues.

Readjustment of the capital account and recapitalization, to which brief sections of the long chapter on reorganization are devoted, are distinguished from reorganization as follows: recapitalization applies to any substantial change in the financial plan of a solvent concern; readjustment of the capital account, to a substantial change resulting from insolvency but without judicial sale; reorganization to a similar change in the financial plan resulting from insolvency and involving a judicial sale. The chapter upon reorganization derives its chief merit from its manner of exposition.

As a whole, Part II of *Corporation Finance* does not convey to the reviewer as vivid an impression of originality as *Capitalization*. But in spite of the fact that it has seemed best to the author to substitute hypothetical examples for existing corporations and existing securities, success has been achieved in retaining the desirable flavor of personal intimacy with actual practices and actual problems which one has been led to expect in Mr. Lyons' work.

H. R. TOSDAL.

Boston University.

Government Telephones. By JAMES MAVOR. (New York: Moffat, Yard and Company. 1916. Pp. 164. \$1.00.)

Professor Mavor's little volume is a history of the publicly owned telephone system of Manitoba, 1908-1916. Professor

Mavor uses this history to justify the conclusion "that the proper function of government is not the conduct of industries, but the impartial inspection of them under intelligent laws adapted to the character and conditions of the community and country." This statement concludes the volume, and is found also at the close of the introduction—a twelve-page discussion of the general principles governing the relationship of government and industry. It may then be fairly called Professor Mavor's thesis.

Manitoba seems to have avoided none of the evils pointed out as inevitable by the opponents of public ownership. Political considerations—the desire for an "issue"—led to the acquirement of the Bell system. And political considerations continued to rule the administration. Though ostensibly turned over to a board of three men (former Bell employees), the actual determination of all questions of policy rested in the hands of a member of the Provincial Cabinet. Political interests (or private interests merged with these political interests) led to the feverish extension of new lines into the rural districts; to the overstocking of supplies; to the employment of men "orally" recommended; to the report of exaggerated profits through failure to set up a depreciation reserve, in the face of recommendations by the Telephone Commission; and, finally, in 1909, to the reduction of charges, at a time when the system was not in fact carrying itself.

When, in 1911, it was proposed to advance rates, "a storm of disapproval swept over the Province," and the government, endeavoring to avoid an attack upon its own members, appointed a Royal Commission of Inquiry to investigate the acts of the *Telephone Commission*. The report of this Royal Commission, presented toward the end of May, 1912, Professor Mavor calls: "An inconclusive and unsatisfactory document . . . at every point the inquiry led to the threshold of the government, but there it stopped. Instead of honestly taking their share of the blame, the government chose the dishonorable course of virtually prosecuting the Commissioners, whose faults arose solely from the fact that they were loyal to a government which was disloyal to them." July 1, 1912, the Telephone Commission resigned, expressing the hope that neither their successors nor the government would be "misled by the gross misstatements of fact, and the erroneous opinions and conclusions expressed in the Royal Commission's report." This incident served to close "the first phase of the history of the Manitoba Government telephone system. . . . After four

years of public ownership a prosperous business was well along the road to ruin."

Subsequently the telephone system has been directed by a single commissioner acting under an advisory board. But Professor Mavor indicates that, in spite of rate advances, financial operations have resulted in real deficits in 1913 and 1914, and that these deficits have again been hidden through inadequate accounting methods. Even the opposition government which came into office early in 1915 (after a second Royal Commission had revealed "incompetence and inefficiency," and had discovered evidence which led to the prosecution of cabinet ministers for fraud) has continued the political tradition. Professor Mavor's third chapter, *The Government System Reorganized*, then closes with a note of hopelessness: "The people of the Province still have no prospect of ultimate relief from the abuses accompanying political control."

Finally comes the chapter of conclusions which is a summary of the abuses developed, and a restatement of the thesis quoted at the head of this review. Has Professor Mavor proved his case? However dark the story, does the experience of eight years in a Canadian province (in a period of depression and barely out of the pioneer stage) warrant generalizations of wide application? Professor Mavor takes his alternative for granted. One cannot but wish that he had outlined something of a constructive program. Beyond indicating faith in regulation and private ownership, and condemning public ownership, in general terms, he does not point a way out. And the Manitoba which he pictures needs help.

HOMER B. VANDERBLUE.

Northwestern University.

NEW BOOKS

COTTER, A. *The story of Bethlehem steel.* (New York: Moody Mag. & Bk. Co. 1916. Pp. 65.)

HEARST, W. R. *Truths about the trusts.* (Rahway, N. J.: Quinn & Boden Co. 1916. Pp. 50.)

JACKMAN, W. J. *Corporations: organization, finance and management.* (New York: Institute of Business & Finance. 1916. Pp. 414. \$3.)

MONTAGUE, G. H. *Business competition and the law. Everyday trade conditions affected by the anti-trust laws.* (New York: Putnam. 1917. Pp. vii, 318. \$1.75.)

To be reviewed.

REED, H. B. *The morals of monopoly and competition.* (Menasha, Wis.: Banta Pub. Co. 1916. Pp. 143.)

To be reviewed.

STEVENS, W. H. S. *Unfair competition. A study of certain practices. With some reference to the trust problem in the United States of America.* (Chicago: Univ. of Chicago Press. 1916. Pp. xii, 265. \$1.50.)

To be reviewed.

WYER, S. S. *Reasonableness and legal right of the minimum charge in public utility services.* (New York: Am. Gas Inst. 1917. \$1.)

Report of the differential rates committee. (New York: National Commercial Gas Association. 1917. Pp. 99, 29.)

United States Steel Corporation. Transcript of record, October term, 1916, no. 481, United States vs. United States Steel Corporation et al., appeal from district court for district of New Jersey; pleadings, orders, etc. (Washington: Superintendent of Documents. 1916. Pp. 386.)

Truster og karteller, en bok om privatmonopoler. (Kristiania: J. W. Cappelen. 1916. Pp. 216.)

Labor and Labor Organizations

Truancy and Non-Attendance in the Chicago Schools: A Study of the Social Aspects of the Compulsory Education and Child Labor Legislation of Illinois. By EDITH ABBOTT and SOPHONISBA P. BRECKINRIDGE. (Chicago: University of Chicago Press. 1917. Pp. xiii, 472. \$2.)

Clear recognition of the essential features of legislation and methods of administration capable of protecting children in fact as well as in theory is the keynote of this valuable study of the two supplemental problems of school attendance and child labor. Here are presented a history of the school attendance and child labor laws of Illinois, a critical description of present conditions in Chicago, and a series of concrete recommendations for improvement both in laws and in methods of administration.

Though emphasis is laid upon methods of putting and keeping children in school, most of the material could just as well have been used under such a title as "Child labor laws and their administration in Chicago." On the one hand, as the purpose of child labor legislation is not merely to keep children out of industry but to keep them in school, the two problems are merely two approaches to the same goal. On the other hand, as all careful administrators of child labor laws have been or are being driven to the conclusion that factory inspection is not alone adequate to

keep children out of industry, it is becoming clear that the only thoroughly efficient method of enforcing a child labor law is to enforce a carefully dovetailed school attendance law. The chapter on The Transfer System, for example, is a valuable contribution to our understanding of an essential feature of good child labor law enforcement. Even the chapter on The Parental School, though describing a school which can at present be used only for children under working age, points out clearly the method of treatment which would prevent older children from drifting into vagrancy while ostensibly "hunting for a job." And the chapter on The School Census throws into relief the corner-stone of thorough enforcement not only of the attendance law but of the child labor law.

The chief recommendations made by the authors for improvements in the child labor law are: first, the creation of a state board or department of education with the duty of issuing employment certificates and of supervising and standardizing the enforcement of the school attendance laws, including the taking of the school census throughout the state; second, the raising of the minimum age for employment from fourteen to sixteen years; third, the requirement before the issuance of an employment certificate of a minimum of physical development which shall insure that no child shall be put to work when he is physically unfit for work and of an educational minimum equivalent to knowledge of the English language and of the usual grade studies at least through the sixth grade; fourth, the requirement that a child shall have a promise of employment before he can be given a certificate and that his employer shall return the certificate when he quits work; fifth, provision for regular attendance at special continuation classes of children under eighteen who are temporarily out of work; sixth, the establishment of a system of compulsory day continuation schools for all working children under eighteen years of age; and seventh, provision for securing jobs for children through the local school authorities.

This book should be carefully read by every administrative officer in charge of the enforcement of school attendance or child labor laws, and also by every person who contemplates the difficult task of drafting such legislation. Practically every feature of the system recommended for Illinois is in effect in one or more other states. Yet even in states which have much better laws and much better methods of administration than Illinois this study will be

found suggestive, for as yet no single state has in effect all the essential features as here outlined of a thorough system of school attendance and child labor legislation.

HELEN L. SUMNER.

NEW BOOKS

BOWERS, W. A. *Strike breakers and their private armies.* (Harrisburg, Pa.: William A. Bowers. 1916. Pp. xx, 105. 25c.)

FAY, A. H. *Metal-mine accidents in the United States during the calendar year 1915.* Technical paper 168, Bureau of Mines. (Washington: Superintendent of Documents. 1917. Pp. 114.)

GOKHALE, S. L. *The unemployment problem, cause and cure, by "Analyticus."* (Schenectady, N. Y.: Sociology Club. 1916. Pp. 170. 50c.)

MARCUS, J. *The power of unionism.* (Boston: United Labor Pub. Co. 1916. Pp. 92. 60c.)

PRATO, G. *Sulle premesse economiche del contratto collettivo di lavoro.* (Torino: Bocca. 1916. Pp. 76.)

A study of the theory of collective bargaining. The author traces the development of thought through Mill and his followers. He surveys the notable developments in labor legislation as they reflect the principles of labor organization—*e. g.*, hindrances upon fluidity through bars to immigration. He studies the results of experience with trade-union actions in various countries. The sketch is worked out in a good deal of detail, drawing upon a large and diverse literature, but it is inevitably suggestive rather than convincing because the complexity of the subject is such that either a highly intensive study should be made or an extensive study should be undertaken upon a much larger scale. Even as it stands, however, it is bound to be helpful to students of labor problems. The author holds with those who believe that the case for trade-union economics is still to be proved.

R. F. F.

SWENSON, R. J. *Public regulation of the rate of wages.* (White Plains, N. Y.: Wilson. Pp. 74. 50c.)

Arbitration between Switchmen's Union of North America and railroads. Two volumes. (New York: Bureau of Information of the Eastern Railways. 1916. Pp. 1495.)

Hearing before the committee on interstate commerce, United States Senate . . . on bills in connection with legislation relative to the threatened strike . . . 1916. Sen. Doc. 549. (Washington: Superintendent of Documents. 1916. Pp. 171.)

Labor disputes and public service corporations. A series of addresses and papers presented at the annual meeting of the Academy of Political Science in the City of New York, November 22-23, 1916. (New York: Acad. Pol. Sci. 1917. Pp. 190. \$1.50.)

Contains the following: "American experience in settlement of disputes," William Lee Chambers; "The Canadian industrial disputes act," Victor S. Clark; "The Australian system of compulsory arbitration," Matthew B. Hammond; "Discussion of governmental mediation and arbitration," Peter F. Brady and Paul S. Collier; "Objections of labor to compulsory arbitration," W. S. Carter; "Constitutional aspects of compulsory arbitration," Thomas I. Parkinson; "Discussion of trade unions and compulsory arbitration," George E. Barnett, Everett P. Wheeler, and Emerson McMillin; "The Erdman, Newlands and Adamson acts," David A. McCabe; "A league to enforce industrial peace," Julius Henry Cohen; "Mutual benefit funds and industrial peace," Miles M. Dawson; "Discussion of mediation and conciliation," A. B. Farquhar, Julius Henry Cohen, N. I. Stone; "Arbitration of recent labor disputes," Oscar S. Straus; "The Adamson act: The employee's viewpoint," W. S. Carter; "The employer's viewpoint," Frank S. Trumbull; "The public viewpoint," Bainbridge Colby.

List of references relating to the eight-hour working day and to limitations of working hours in the United States, with special reference to railway labor. (Washington: Bureau of Railway Economics. 1916.)

List of references to books and articles on the Adamson law of September, 1916. (Washington: Bureau of Railway Economics. 1916.)

Oregon minimum wage cases. Supreme Court of the United States, October term, 1916, nos. 25 and 26. (Washington: Superintendent of Documents. 1917. Pp. vi, 783.)

To be reviewed.

Railway trainmen's earnings, 1916. Compiled from reports to the Interstate Commerce Commission. Miscellaneous series no. 28. (Washington: Bureau of Railway Economics. 1917. Pp. 18.)

Rules and regulations relating to safe and sanitary working conditions in foundries and the employment of women in core rooms. (Boston: State Board of Labor and Industries. 1917. Pp. 18.)

Money, Prices, Credit, and Banking

NEW BOOKS

CHABOT, G. *Graphic charts of the course of the Rotterdam exchange with England, France and Germany from 1913 to 1916.* (Rotterdam: Gebroeders Chabot. 1917.)

DHARI, A. *Coöperative credit in Gwalior State.* (Lucknow: Newul Kishore Press. 1915. Pp. 143.)

GIBBS, W. S. *The minimum cost of living: a study of families of limited income in New York City.* (New York: Macmillan. 1917.)

HOWARD, H. F. *Report on the operations of the currency department for the year 1915-16.* (Calcutta: Superintendent of Government Printing. 1916. Pp. 65.)

LOMBARD, N. *Disadvantages of the federal farm loan system to the borrowing farmer.* (San Francisco: Agricultural Credit Coöperation of California. 1917. Pp. 15.)

MACDONALD, G. *The evolution of coinage.* (Cambridge, Eng.: University Press; New York: Putnam. 1916. Pp. vi, 148. 45c.)

In this little volume, by the honorary curator of the Hunterian Coin Cabinet, the reader will find an account, admirably written and illustrated, of the development of coinage in its technical and general aspects. The economic history of the subject is not included in the author's plan.

C. D.

PAINE, W. S. *Paine's analysis of the federal reserve act and cognate statutes, including analyses of the federal farm loan act, the bill of lading act, the amendment of the eighth section of the anti-trust act, and the rules and regulations of the Federal Reserve Board, annotated.* (New York: Bankers Pub. Co. 1917. Pp. xiii, 416. \$5.)

PATTERSON, E. L. S. *Notes on foreign exchange and a glossary of financial terms.* (Toronto: Shaw Correspondence School. 1916. Pp. 236.)

This is a correspondence school book written primarily for beginners. It is an attempt to explain in simple language and with numerous concrete illustrations the essential principles and the practice of foreign exchange, with particular reference to the Canadian standpoint. The book will make its strongest appeal to ambitious bank clerks who are looking for a brief practical treatment of foreign exchange, although its numerous tables, and mathematical illustrations of the simpler technique of foreign exchange will make it a useful reference book to the banker and the university student.

The book readily divides itself into four parts: (1) Eight chapters, covering 73 pages, devoted to definitions, the principles of exchange (14 pages), "a day in the exchange box," and brief descriptions of the principal exchanges. These eight chapters, which are the best part of the book, were "originally written for private circulation among students preparing for the associates' course of the Canadian Bankers Association," and were previously published under the title of *Foreign Exchange Arithmetic*—a title which well connotes their character. Principles are stated briefly and in a very elementary way, although in the main with essential accuracy. The bulk of the treatment is given to practical definitions, descriptive material of a rather choppy character, examples and tables. (2) The second part, covering ten chapters and totaling 42 pages, treats topically in much the same manner, subjects like rates of interest, arbitrage, gold shipments, finance bills, war and exchange, etc. (3) The third part (30 pages) consists of four appendices, chiefly tabular in character, giving statistical data concerning the foreign exchanges. (4) The fourth part (89 pages) is a glossary giving brief definitions of financial terms.

The book is what it pretends to be, a collection of notes and

tables on foreign exchange. As such it will serve as a useful practical manual to the bank clerk, both in Canada and the United States, and as a statistical reference and "example" book on foreign exchange to the college student. It is not an integrated scientific discussion of foreign exchange, and its explanations of the principles of foreign exchange are not sufficiently accurate nor full to commend the book as the sole textbook on foreign exchange for college classes.

E. W. KEMMERER.

PUTNAM, G. E. *The land credit problem*. (Lawrence, Kans.: University of Kansas. 1916. Pp. 107.)

The subtopics of this study are: "Land mortgage credit in the United States"; "The rural credit movement"; "Land credit for landowners"; "Tenancy and land tenure reform"; "The federal farm loan act."

RUSSELL, T. H. *Banking, credits and finance*. (New York: Institute of Business & Finance. 1916. Pp. 443. \$3.)

Acceptances. (New York: Guaranty Trust Co. 1917. Pp. 29.)

Complete text, with analysis, of the federal bill of lading act (Pomerene act) making negotiable bills of lading in interstate and foreign commerce. Effective Jan. 1, 1917. (Philadelphia: National Bank News. 1916. Pp. 16. 10c.)

Second annual convention of the corporations operating the Morris plan of industrial loans and investments, Wednesday to Friday, October 4 to 6, 1916. (New York: Indus. Finance Corp., Service Dept. 1916. Pp. 92.)

Second annual report of the Federal Reserve Bank of Boston. January 1, 1916, to December 31, 1916. (Boston: Federal Reserve Bank of Boston. 1916. Pp. 17.)

What it costs to run a bank. (Chicago: A. W. Shaw Co. 1916. Pp. 55. \$2.)

This represents an interesting investigation prepared by the Bureau of Business Standards of the A. W. Shaw Company of Chicago. The results are presented as of progress and not final. The inquiry is based on the experience of banks in eighteen states. Costs have increased from 15 to 30 per cent in ten years. The operation cost of national banks in proportion to total earnings is lowest in the East and highest on the Pacific coast. Tables show percentages for different classes of banking institutions by principal objects of expenditure, such as salaries, advertising, taxes and insurance, rent, etc. One tabulation shows the number of checks per million dollars of deposits. Further tables illustrate the art of handling depositor accounts.

The United States postal savings system. Excerpts from the report of the Third Assistant Postmaster General for the year ended June 30, 1916. (Washington: Superintendent of Documents. 1916. Pp. 16.)

Public Finance, Taxation, and Tariff

The Taxation of Land Value; a Study of Certain Discriminatory Taxes on Land. By YETTA SCHEFTEL. Hart, Schaffner & Marx Prize Essays, XXII. (Boston: Houghton Mifflin Company. 1916. Pp. xv, 489. \$2.00.)

This book deals with the special taxes upon land that in the last fifty years have been adopted in several countries, notably Australasia, Canada, England, and Germany. Miss Scheftel undertakes (1) to describe these taxes as they have developed in each of these countries, showing their setting in fiscal and social policy, and (2) to consider them critically with a view to determining their expediency where adopted and the desirability of their introduction into the United States. This book is not, as claimed in the publisher's announcement on the book's wrapper, "the first attempt to differentiate between the tax on land value and the single tax, to define the first-named tax and its underlying principles." But it well may be said to be the first attempt "to present fully the experience with the system of the countries which have introduced the tax."

The chapters devoted to description of the special land taxes occupy about three fifths of the book. The best part of Miss Scheftel's work, in the judgment of the reviewer, is the careful and complete account of the complicated land taxes of Australasia, Germany, and Great Britain. Her chapters on the Australasian experience constitute the most comprehensive discussion of this topic that has been given. The account of the German taxes on "unearned increment" is based upon a thorough study of both primary and secondary German sources, and is easily the best account in English. The discussion of the English land taxes of 1909 presents interestingly the problems of administration that have arisen, and summarizes such results as have thus far appeared. The chapter on Municipal Taxation in Western Canada is less satisfactory, inasmuch as that topic has been much more exhaustively covered in Professor Haig's report for the New York City Committee on Taxation of 1916. Miss Scheftel has performed a useful service in bringing together in a single volume the main facts regarding these taxes. Her work shows careful and painstaking research.

In the critical part of the book the author considers "The tax in its fiscal aspect," "The tax as a social reform," and "Expediency of the tax on land value for the United States." In these

chapters a very wide range of topics is discussed, including assessment and administration, incidence, effect on land speculation and housing, amount of "unearned increment," extent of so-called land monopoly, productiveness of the tax, public expenditures, home rule, and conservation of natural resources. Many suggestive ideas are discussed, but one reads this part of the book with the feeling that the author has attempted too much. It also brings home to the reader the size of the unexplored areas in this interesting field that lies in the domains of politics and ethics as well as of economics.

Miss Scheftel's conclusions recognize the difficulty of measuring the effects of these taxes very exactly in a complicated dynamic economic situation. She is unable to discover social results of prime importance that can be attributed directly to them. They have been inadequate: "seriously to check speculation, reduce rents, and ameliorate housing conditions," and hopes of vital social betterment through them "appear vain, on the whole." On the other hand one must consider "the harmless nature of the change." "Nevertheless, as a fiscal measure, its influence toward reform, its tendency to check speculation in land, to relieve congestion, to appropriate some of the value increment for public purposes, and thus to relieve the burden to some extent from industry, outweigh the charge of discrimination against the landowning class" (pp. 420-421). As to its expediency for the United States, where real estate is already heavily taxed, the author's conclusions are not clear cut.

A few loose statements of economic theory are found, as the sentence, "Land as a non-reproducible good becomes subject to monopoly price, whenever the demand for a certain quality or kind exceeds the supply" (p. 368). Also the author apparently accepts the single tax phrase "land monopoly," without giving any evidence that land rentals or selling prices are determined other than competitively (*e.g.*, pp. 19, 31, 368, 369). Speculative withholding of land from the market fits accurately enough into the theory of determination of competitive market price.

A full and excellent bibliography is appended. But the index, with only four pages, is inadequate for nearly five hundred pages of condensed facts.

ARTHUR N. YOUNG.

Princeton University.

Un Programa Económico y Financiero. By SANTIAGO ALBA. (Madrid: Sobrinos de la Sucesora de M. Minuesa de los Rios. 1916. Pp. xciii, 241.)

The author of this work was minister of finance in the recent Romanones cabinet. He has undertaken the presentation of an ambitious plan of financial and social reform, one of the most elaborate of many such programs which have lately been offered by Spanish cabinet officials. A brief general survey of the financial status of Spain during the past fifteen years, as given in a speech by the author in the Spanish senate, is followed by a more detailed examination of recent budgets and of the means available for the removal of the annual deficit.

It is significant that the acute financial distress brought on by the war is offered as scarcely more than an incidental explanation of the need for reform. The gravity of Spain's financial situation, in Sr. Alba's opinion, goes well back of 1914, and the crucial conditions of the past two and a half years represent the accumulation of older short-sighted policies.

After calling attention to the extraordinary growth of the budget, from 960,000,000 pesetas in 1901 to 1,512,000,000 in 1915, he analyzes briefly the causes of this rise. Chief among these he finds the excessive costs of the campaigns in Morocco, which have risen steadily from 66,000,000 in 1909 to nearly 144,000,000 in 1915. Unfortunately he has not found it necessary, perhaps because of political expediency, to make an analysis of the causes of this situation. A careful review of the financial aspects of Moroccan affairs would go far toward explaining much of Spain's recent and future financial difficulty.

The author is primarily concerned with suggestions for the improvement of the national income and the careful guarding of the royal treasury against every unnecessary expenditure. In this connection he devotes some space to a denunciation of a proposed payment to Spanish exporting houses of "drawbacks" or refunds of duties paid upon imported raw materials. His chief objection to this plan is that it would mean a serious drain upon the national treasury; he does not, however, present any statistical analysis of the matter.

An interesting feature of his recommendations is the emphasis laid upon extending government ownership or regulation of various industries in addition to those already under public control (tobacco, matches, salt, etc.). Spain is evidently being swept along

on the same tide with her belligerent neighbors, and the emergencies of the war seem destined to bring unusual changes to one of the most conservative and economically backward of European states.

Recent events in the Peninsula indicate that if trouble occurs in Spain during the present conflict, the explanation will be, not a violent insistence that Spain join the forces with or against the Allies, but simply a blind protest against impending famine regardless of causes. In view of this situation, the present volume would have been perhaps more interesting and illuminating, had more attention been given to the fiscal attitude of the government toward the food problem. This is obviously destined to be the most engrossing question before the Spanish people and their officials for some time to come. The very fact that it is scarcely touched upon in Sr. Alba's work may, in itself, be an indication of the reason for the ominous impatience of the populace in various parts of the country.

JULIUS KLEIN.

Harvard University.

NEW BOOKS

CUSTIS, V. *The state tax system of Washington*. (Seattle: University of Washington. 1916. Pp. vi, 142.)

Most of the studies relating to the tax system of a single state are locally centered. Each deals with the peculiarities of one state, the history of its tax system, its present situation and needs. General principles come in, if at all, only as a solvent for local problems. Dr. Custis has dealt with the tax system of Washington in a broader manner. He starts with the general principles involved in taxation for state and local purposes and reviews the progress toward new things in taxation that is being made in other states before taking up the local situation. It is not, however, to be understood that the local situation is on that account not well and fully described. The book is published by the University Extension Division of the University of Washington, and reads as though it originated in a series of extension lectures, designed to give the people of that state instruction in the general principles of taxation as well as knowledge of their own system. No definite program of reform is advocated. Yet one gathers that the author favors centralized administration, a state income tax, partial separation, and a little classification. It is hard to point to any other one volume that contains so extended a survey of state and local taxation in the United States. It is a pity that it is printed in such fine type that it is very trying to read.

CARL C. PLEHN.

FLORA, F. *Mannela della scienza delle finanze*. Fifth edition. (Livorno: Giusti. 1917. Pp. xxxiv, 871.)

GAFFNEY, J. P. *Taxation and new sources of revenue*. (Philadelphia: Finance Committee. 1916. Pp. 22.)

GIRAULT, A. *La politique fiscale de la France après la guerre*. (Paris: Librairie de la Société du Recueil Sirey. 1916.)

GROSSOT, T. *Pour augmenter la puissance financière de la France*. (Bourges: Fovvier. Pp. 12.)

HANNAN, W. E. *Property exempt from taxation in the forty-eight states*. University of the State of New York Bulletin, No. 638. New York State Library, Legislation Bulletin 42. (Albany. 1917. Pp. 239.)

The data are grouped under the following heads: 1. Constitutional and statutory provisions showing property exempt from taxation in all states; 2. Subject digest of property exempt from taxation by statute; 3. Tables showing value of public property and taxable and exempt property in all the states; 4. Tables showing the amount of property exempt in the states of Connecticut, Massachusetts, New Jersey, and Rhode Island; 5. For the state of New York from 1900 to 1915; 6. For each county of New York state from 1900 to 1915; 7. Tables showing inheritance tax rates and amount of exemptions.

HARISTOY, J. *L'impôt sur le revenu. Loi de finances du 15 juillet 1914. Loi du 29 décembre 1915, art. 5*. Second edition. (Paris: Giard & Brière. 1917. 3.50 fr.)

HUSSON, L. *Les services industriels de l'Etat et leurs méthodes financières*. (Paris: Giard & Brière. Pp. 157.)

JÈZE, G. *Les finances de guerre de l'Italie*. (Paris: Giard & Brière. 1916. 3 fr.)

LEFEUVRE-MEAULLE, H. *La Grèce économique et financière en 1915*. (Paris: Alcan. 1916. Pp. 258.)

LEVINE, L. *Equalizing tax burdens in Montana*. Reprinted from the *Daily Missoulian*. (Missoula, Mont.: 1917. Pp. 15.)

LEWIS, D. B. *Income tax guide for individuals; the federal income tax law as amended September 8, 1916, the Massachusetts income tax law of 1916*. (Boston: D. B. Lewis & Co. 1916. Pp. 50. \$1.50.)

MATHEWS, J. M. *Principles of American state administration*. (New York: Appleton. 1917. Pp. xiii, 533. \$2.50.)

Contains two chapters (pp. 215-295) on state finance with critical and historical discussion of the general property tax; equalization; assessment; tax commissions; taxation of corporations; classification of taxable property; accounting methods; accounts; and a bibliography of two pages.

MILLER, E. T. *A financial history of Texas*. Bulletin of the University of Texas, 1916, no. 37. (Austin: Univ. of Texas. 1916. Pp. viii, 444. \$1.)

This is one of the studies in local financial history resulting under the auspices of the Carnegie Institution.

The financial history recorded here is in part kaleidoscopic in the bewildering rapidity of its changes. As the author says in his preface: "Texas has been under the flags of France, Spain, Mexico, the Republic of Texas, the Confederate States of America, and the United States." The early changes in government passed, however, so rapidly that but scant traces are left today of their influence on the financial system. The Spanish period is passed over briefly in a few pages. The revolutionary period, with its makeshifts in finance, is also very briefly told. The interesting period of the Republic is, however, treated more fully. Compared with her sister states, Texas had a novel experience in being for a time an independent state with power to levy customs and to issue money. But outside of this, which is interesting for its novelty, it appears that the most significant thing in this stage of the development is the beginnings of the property tax. Here we find history repeating itself and a property tax commencing as a specific property tax much as it did in New England under not dissimilar conditions. Even the land tax with its minimum valuations was for a time practically a specific and not an ad valorem tax. The system of business taxes found in the southern states generally crept into Texas in this period.

The chief interest in the next period, that from 1846 to 1861, centers in the negotiations with the federal government over the assumption of the debt of the Republic. The final outcome of this was the presence in the treasury of Texas, at the time of secession, of United States bonds, which during the first part of the war furnished funds with which to fight the issuer. After the reconstruction period the interest centers in the development of special taxes on corporations, and then in the troubles encountered in handling the great tracts of public lands. But this story is too long and too involved to recapitulate here. In other respects the history of taxation in Texas in recent times shows but little variation from that of any other state.

CARL C. PLEHN.

NELSON, G. N. *Income tax law and accounting*. (New York: G. N. Nelson. 1917. Pp. 205. \$1.)

RANDOLPH, J. F. *United States inheritance and transfer taxes; including federal and state laws for 1916, and rules for procedure under the federal act*. (Newark, N. J.: Soney & Sage. 1916. Pp. 243. \$3.)

REX, B. *Quatre cents milliards, étude sur le coût de la guerre et les indemnités que les puissances ennemies pourront payer*. (Paris: Berger-Levrault. 1917. 1.50 fr.)

ZIMMERMAN, F. W. R. *Die Finanzwirtschaft des Deutschen Reichs und der Deutschen Bundesstaaten zu Kriegsausbruch 1914*. (Berlin: Göschen. 1916. Pp. 237.)

- An analysis of Toronto's budget for 1916, based upon the official estimates, rearranged so as to show costs of service rendered and of things purchased.* (Toronto: Bureau of Municipal Research. 1916. Pp. 40, illus.)
- Annual report of the comptroller of the state of New York.* (Albany: Comptroller's Office. 1917. Pp. 277, xxiii.)
- War loans and the United States.* (New York: Guaranty Trust Co. 1917. Pp. 32.)
- Les zones franches et l'exportation française. Documents et arguments réunis par la Chambre de Commerce de Marseille.* (Paris: Alcan. 1916. Pp. 255. 3.50 fr.)

Population and Migration

NEW BOOKS

- BODART, G., and KELLOGG, V. L. *Losses of life in modern wars: Austria-Hungary, France. Military selection and race deterioration.* A publication of the Carnegie Endowment for International Peace. (Oxford: Clarendon Press. 1916. Pp. x, 207. 6s.)
- EVJEN, J. O. *Scandinavian immigrants in New York, 1630-1674; with appendices on Scandinavians in Mexico and South America, 1532-1640, Scandinavians in Canada, 1619-1620, some Scandinavians in New York in the eighteenth century, German immigrants in New York, 1630-1674.* (Minneapolis, Minn.: Holter Pub. Co. 1916. Pp. xxiv, 438.)
- GURNEY, A. E. *The population of the Polish commonwealth.* (London: Allen and Unwin. 1916. Pp. 39. 6d.)
- HIBBS, H. H. *Infant mortality: its relation to social and industrial conditions.* (New York: Russell Sage Foundation. 1916. Pp. viii, 127.)
- LI, T. L. *Congressional policy of Chinese immigration.* (Nashville, Tenn.: Publishing House of the Methodist Episcopal Church, South. 1916. Pp. 132.)
- MEIGS, G. L. *Maternal mortality from all conditions connected with childbirth in the United States and certain other countries.* Miscellaneous series, no. 6. (Washington: Children's Bureau. 1917. Pp. 66.)
- MORE, A. *Fecundity versus civilisation. A contribution to the study of over-population, as the cause of war and the chief obstacle to the emancipation of women. With special reference to Germany.* (London: Allen and Unwin. 1916. Pp. 52. 6d.)
- WATTAL, P. K. *The population problem in India.* (Bombay: Bennett, Coleman & Co. 1916. Pp. 83.)
- WILLIAMS, H. P. *A social study of the Russian German.* (Lincoln, Neb.: University of Nebraska. 1916. Pp. 101.)

At the time the long continued German immigration to Pennsylvania came to an end, about the middle of the eighteenth century, a stream of Germans began to move toward two of the Volga provinces of Russia. After 1870, various guaranteed liberties having been withdrawn, the Russian Germans began to migrate to America, settling in Kansas, Nebraska, and the Dakotas. The main period of their immigration began in 1898. They commonly went straight to their western destinations. The 6500 "Russians," as they are called, of Lincoln, Nebraska, are the largest colony in America, but are, of course, Germans ignorant of the Russian language. It is a peculiarly interesting immigration of a kind which must be new to many students.

On the basis of a canvass and of local records, Miss Williams has competently described the character of the immigration in Lincoln, its family constitution and more important vital statistics, interspersing much very interesting information involving the psychology of the group. The two chapters now published she expects to extend into a book.

R. F. FOERSTER.

WORMS, R. *Natalité et régime successoral*. (Paris: Payot et Cie. 1917. 3.50 fr.)

The declining birth-rate. Its causes and effects. Being the report of and the chief evidence taken by the National Birth-Rate Commission, instituted, with official recognition by the National Council of Public Morals, for the promotion of race regeneration, spiritual, moral and physical. (New York: Dutton. 1916. Pp. xiv, 450.)

Lectures and addresses on the negro in the South. Phelps-Stokes fellowship papers. (Virginia: Univ. of Virginia. 1915. Pp. 128.)

The most notable feature in these lectures is that the scientific spirit controls. One of the writers, Alfred H. Stone, says: "The world of scholarship, the standards of modern research, and the importance of the subject alike demand something more at the hands of Southern people than sentimental twaddle about black mammies and faithful body servants, on the one hand, and generalizing dissertations upon negro inefficiency and criminality, on the other." The subjects discussed include considerations of the responsibility of the Southern white man to the negro, of race adjustments in the South, and the new reconstruction going on in that section. The discussions may be summarized in what one writer characterized as a new creed for the Southern white man, as a "basis of understanding and a program of progress": First, the Anglo-Saxon people dominate and direct civilization in the South. Therefore "the fear begotten in reconstruction days is utterly unjustified now." Second, the negro is a man, "a human being first of all." Third, the negro is a Southern man. Therefore it is the Southern white man who, in the last analysis, is most vitally concerned in the solution of the race problem. Fourth, there is an obligation on the white man in the South to broaden his influence over the other race through a scientific approach to the solution of race problems in

order that there may be "an arresting of the growing tendency toward cleavage between the best elements of both races, a lessening of contact between the worst, and a restraining of the forces which make for the negro's physical, mental, and moral degeneracy."

EDWIN S. TODD.

Mortality from cancer and other malignant tumors in the registration area of the United States, 1914. (Washington: Bureau of the Census. 1916. Pp. 212.)

Social Problems and Reforms .

Constructive Rural Sociology. By JOHN M. GILLETTE. New edition, revised and enlarged. (New York: Sturgis and Walton Company. 1915. Pp. xiii, 301. \$1.60.)

This volume covers the entire field of rural sociology. Its particular task is "to take a full inventory of the facts and conditions of life in rural communities." In the first two chapters the author outlines the scope and meaning of the subject and distinguishes between the rural and urban community. The third chapter is devoted to an analysis of four types of rural communities resulting from the differentiating effects of environment: (1) pure agricultural type; (2) mixed-agricultural type; (3) frontier type; (4) backward communities. By the term "environment" is meant "not only the physical but also the occupational and historical conditions."

The movement of population from country to city is considered in the fourth chapter with exceptional clearness and accuracy. We are asked to note a distinction in the "fundamental" and "casual" influences incident to the drift of population to cities. Industrial and commercial aggregations are essential to the age, and in so far as the great population movement takes place in response to scientific and technological principles governing the growth of industry it cannot be prevented. On the other hand, the response to causal influences—social, cultural, vocational, and recreational—may be checked by setting up counter-attractions in the country.

In chapters 7, 8, 9, and 10 much matter has been incorporated which belongs to the field of agriculture and rural economies. This fact, however, does not detract from the usefulness of the book. The author's treatment of such topics as farm management and marketing, benefits of organization, improvement of transportation and commerce, the social aspects of land and labor, etc., constitutes some of the most suggestive portions of the volume.

The rest of the book is given over to a consideration of rural social institutions. A stirring plea is made for rural leadership—a leadership now so difficult to obtain because practically all of the students and graduates of agricultural colleges, normal schools, and universities settle in cities or semi-urban communities. There is little hope, in fact, that the product of the higher institutions can be retained in the country. Hence, “the task of securing this qualified leadership is gigantic and rural improvement, in view of its scarcity, almost appears as a remote dream.” The solution apparently rests in part in arousing farmers who are most successful in farm management to a sense of leadership. It is likewise imperative that rural institutions not only impart technical knowledge, but also infuse “ideals of heroism and attainment which are not foreign to the country and which will not have to be imported to the city to be realized.”

The author manifests thorough familiarity with the literature of his subject; and only in occasional instances does he rely on source materials rather than first-hand knowledge in handling his theme. As an example of the latter, under “Backward Communities” the discussion of mountain whites is descriptive of conditions which existed ten or twenty years ago rather than today. Mention of the rapid evolution taking place in this type of backward community would have atoned.

Professor Gillette has succeeded in supplying a good text for use in colleges or in agricultural and normal schools. A timely and interesting preface is written by George E. Vincent.

T. R. SNAVELY.

University of Virginia.

NEW BOOKS

ARMSTRONG, D. B., SCHNEIDER, F., and DUBLIN, L. I. *Methods of investigation in social and health problems: The necessity for health standards; some shortcomings of socio-sanitary investigations; the application of the statistical method to public health research.* (New York: Russell Sage Foundation. 1916. Pp. 24.)

ARONOVICI, C. *The social survey.* (Philadelphia: Harper Press. 1916. Pp. 255. \$1.25.)

This little volume is the first attempt to present in book form the purposes, scope, and methods of the social survey. For this reason, if for no other, it represents a significant development in the rapidly growing literature of community surveys. The book itself, as the author states in the preface, is an enlargement of his pamphlet *Knowing One's Own Community* published by the department of

social and public service of the American Unitarian Association. In presenting the material in this new form the purpose of the author is merely "to present to the reader broad outlines of general investigation" on the ground that "a guide for social survey work that would cover the whole field of surveys and include a discussion of technique required for an efficient collection, classification, and interpretation of social facts, is beyond the scope of this book."

The following titles of the main divisions of the work will indicate its range: the meaning of the survey; general considerations; character of the community; the city plan; local government; suffrage; industry; health; leisure; education; welfare agencies; crime; statistical facts and the survey; social legislation and the survey; the facts and the people; a social program. Each main heading is subdivided into topics. Under each topic are generalities in regard to its nature and importance and a questionnaire of pertinent and suggestive inquiries. Schedule forms are presented only in the case of family budgets, housing, and institutional equipment.

The volume gives evidence of rather hasty composition. Its workmanship is distinctly inferior to the grade which the writer has maintained in special articles. Current platitudes too frequently appear as substitutes for clear thinking. Many needlessly involved and cumbersome sentences are to be found in the book. An example of this "sentence jumble" is the definition of "industry" (p. 58). The book gives little or no evidence of any utilization of the numerous reports of social surveys. A noticeable deficiency is the absence of even a brief resumé of the social survey movement.

The merits, rather than the deficiencies, of the book are likely to impress the majority of its readers. The section on housing is an exceptionally good piece of work. Well-selected charts provide striking illustrations. The material on the subject of planning for the survey, and on the methods of securing social action after the survey contain many common-sense suggestions of value to communities and survey workers. The bibliography is of service not only for its representative enumeration of surveys, but also for the classified selection of books. There is, however, no acknowledgment of the author's evident indebtedness to the *Bibliography of the Social Survey*, published by the Department of Surveys and Exhibits of the Russell Sage Foundation.

ERNEST W. BURGESS.

AYRES, L. P. *The Cleveland school survey. Summary volume.* (Cleveland, O.: The Survey Committee of the Cleveland Foundation. 1917. Pp. 363.)

Chapters on "The school and the immigrant" and "Financing the public schools."

BATES, F. G. *City planning.* Information bulletin no. 8. (Indianapolis: Indiana Bureau of Legislative Information. 1916. Pp. 31.)

A discussion of regulation of private property. Considers height of buildings, area limitations, offensive uses, zoning, private coöpera-

tion, and subdivisions. The financial problems of city planning are examined. There is a bibliography.

BENSON, T. B. *A treatise on the Virginia prohibition act.* (Charlottesville, Va.: L. F. Smith and W. F. Souder, Jr. 1916. Pp. 197. \$2.50.)

BRADLEY, F. S. and SHERRON, F. B. *How to conduct a children's health conference.* Miscellaneous series no. 9. (Washington: Children's Bureau. 1917. Pp. 24.)

CARBAUGH, H. C. *Human welfare work in Chicago.* (Chicago: McClurg. 1917. Pp. 260. \$1.50.)

DURELL, F. *Fundamental sources of efficiency.* (Philadelphia: Lippincott. 1917. \$2.50.)

ELLIS, H. *Essays in war time; further studies in the task of social hygiene.* (Boston: Houghton Mifflin. 1917. Pp. 252. \$1.50.)

Readers not familiar with Havelock Ellis' writings, especially his *Task of Social Hygiene*, will find this a stimulating, although a somewhat choppy volume. To others the book will neither add to nor detract from Mr. Ellis' reputation as a keen and constructive critic of modern social problems. The essays are all brief, the first seven dealing with various moral and evolutionary aspects of war, the last three with the birth rate in its moral aspects, and the rest with various phases of public health, eugenics, and the relation between the sexes. The essay on Birth Control is eminently sane and well considered, and is, together with the proposal for the nationalization of medical service, the real contribution of the book.

A. B. WOLFE.

GALPIN, C. J. *The country church an economic and social force.* (Madison: Agricultural Experiment Station of the University of Wisconsin. 1917. Pp. 48.)

HAINES, T. H. *The increasing cost of crime in Ohio.* (Columbus: Ohio Board of Administration. 1916. Pp. 10.)

HARRISON, S. M. *Community action through surveys.* (New York: Department of Surveys and Exhibits. Russell Sage Foundation. 1916. Pp. 29. 10c.)

Probably the best statement, to date, of the characteristics and results of the social survey. The survey, according to the writer, "is an implement for more intelligent democracy, its chief characteristics being: the careful investigation, analysis, and interpretation of the facts of social problems; the recommendations and outlining of action based on the facts, and the acquainting and educating of the community not only to conditions found but to the corrective and preventive measures to be adopted."

The Springfield (Illinois) survey, of which the writer was director, is described as an illustrative example of survey organization, methods, and results. The telling enumeration of fifty specific accomplishments of survey recommendations in this city indicates

the value of this new means of community education for social action.

ERNEST W. BURGESS.

LIT, J. S. R. *Twelfth report of the Henry Phipps Institute for the study, treatment, and prevention of tuberculosis. Storage, handling, and sale of food inspection service in Philadelphia.* (Philadelphia: Henry Phipps Institute. 1916. Pp. 94.)

LUTZ, R. R. *Wage earning and education.* Cleveland education survey. (Cleveland, O.: The Survey Committee of the Cleveland Foundation. 1916. Pp. 208. 50c.)

MACDONALD, A. *War and criminal anthropology.* (Washington: Superintendent of Documents. 1917. Pp. 39.)

MACLEAN, A. M. *Women workers and society.* (Chicago: McClurg. 1916. Pp. 135. 50c.)

MANGOLD, G. B. *Public treatment of drunkenness in St. Louis.* (St. Louis, Mo.: Washington Univ. 1916. Pp. 38.)

NOLEN, J. *More houses for Bridgeport. Report to the Chamber of Commerce, Bridgeport, Conn.* (Bridgeport: Chamber of Commerce. Aug., 1916.)

Seventy-four Bridgeport manufacturers reported to Dr. Nolen that 2260 of their employees were in need of better housing and that housing accommodations should be constructed for 14,000 more persons because especially of the expansion of munition industries. The wages of men needing housing accommodations range from \$13 to \$27.50. Over two thirds of the workers to be housed are foreign born or of foreign parentage, and about 60 per cent are married. Mr. Nolen recommends the establishment of a Bridgeport Housing Company with a capital of \$1,000,000, and urges large-scale construction of single-family dwellings for sale. Photographs and plans are offered of cottage dwellings constructed by various American companies for their employees. A "List of low cost housing developments in the United States," compiled by Robert L. Davison from material deposited in the Social Ethics Department of Harvard University, is submitted.

J. F.

PRINZING, F. *Epidemics resulting from wars.* A publication of the Carnegie Endowment for International Peace. (Oxford: Clarendon Press. 1916. Pp. ix, 340. 7s. 6d.)

RICHARDSON, A. W. *The nation and alcohol.* (London: The Student Christian Movement. 1917.)

ROMAN, F. W. *The industrial and commercial schools of the United States and Germany: a comparative study.* (New York: Putnam. 1916. Pp. 382.)

RUSSELL, B. A. W. *Principles of social reconstruction.* (London: Allen & Unwin. 1916. Pp. 251.)

An American edition, published by the Century Company, has the title, "Why men fight." Topics covered are: the principle of

growth, the state, war as an institution, property, education, marriage and the population question, religion and the churches, what we can do.

SAFFORD, M. V. *Influence of occupation on health during adolescence. Report of the physical examination of 679 male minors under 18 in the cotton industries of Massachusetts.* Public health bulletin, no. 78. (Washington: United States Public Health Service. 1916. Pp. 51.)

SCHNEIDER, F., JR. *Relative values in public health work.* (New York: Russell Sage Foundation. 1916. Pp. 10. 10c.)

SEASHORE, C. E. *A child welfare research station.* (Iowa City: State University of Iowa. 1917. Pp. 18.)

SHEPHERD, R. P. *Essentials of community efficiency.* (Chicago: The Abingdon Press. 1916. Pp. 273.)

A collection and revision of material presented by the author in public lectures on community betterment. His aim is "to put all the principles of community efficiency in a human setting and to do this in a way which would be both readable and challenging to the leaders of local sentiment." In this task of stating community problems, of applying efficiency tests, of suggesting constructive action based upon modern social theory and experience, all in language non-technical and stimulating, the writer is surprisingly successful; due in part, no doubt, to the fact that the subject-matter has stood the severe test of the popular audience.

While the volume is not addressed to the academic group, the sociologist will be interested in a reference to the central idea which is the organizing principle of the book. This thesis is that the welfare of the community rests upon the efficient organization of its group interests. Each group interest in itself is regarded as a smaller community within the larger inclusive community. The following chapter headings indicate the development of this conception: the educational community, the child community, the youth community, the parent community, the religious community, the commercial community, the industrial community, the agricultural community, the social community, the political community. Extensive use of this book as a manual for study clubs in villages, towns, and smaller cities is recommended as a valuable first step in community organization.

ERNEST W. BURGESS.

TILLYARD, F. *Legal hints for social workers.* Fourth edition, revised and enlarged. (London: National Union of Women Workers. 1916. Pp. 64.)

WALTER, H. R. *Investigations of industries in New York City, 1905-1915; a list of published reports.* (New York: Russell Sage Foundation. 1916. Pp. 24. 10c.)

WARD, H. F. *The living wage a religious necessity.* (Philadelphia: American Baptist Pub. Soc. 1916. Pp. 24. 10c.)

WEEKS, A. D. *The psychology of citizenship*. (Chicago: McClurg. 1916. Pp. 152. 50c.)

A review of mental traits as against a background of civic economic questions, following these topics; Civic demands upon intelligence; social inertia; the limits of attention; forms of distraction; the effect of machinery upon the mind; the spirit of labor; the control of suggestion; civic publicity and the voter; the legal mind; views of property; a sense of humanity.

WEIDENSALL, J. *The mentality of the criminal woman; a comparative study of the criminal woman, the working girl, and the efficient, working woman in a series of mental and physical tests*. (Baltimore: Warwick and York. 1916. Pp. 332.)

WILSON, J. L., editor. *Questions of the hour: social, economic, industrial study outlines based on twenty-two volumes in the Debaters' Handbook series*. (White Plains, N. Y.: Wilson Co. 1916. Pp. 30. 25c.)

YEOMANS, A. B., editor. *City residential land development: studies in planning. Competitive plans for subdividing a typical quarter section of land in the outskirts of Chicago*. (Chicago: City Club. 1917. Pp. 138.)

Commercial prostitution in New York City; a comparison between 1912, 1915, and 1916. (New York: The Bureau of Social Hygiene. 1916. Pp. 16.)

Employment for the handicapped. A selected bibliography. (New York: Russell Sage Foundation. 1917. Pp. 3.)

Fourth annual report of the chief of the Children's Bureau to the Secretary of Labor. (Washington: Superintendent of Documents. 1916. Pp. 27.)

Maternity and child welfare. (London: Local Government Board. 1916. 2d.)

The progress of housing reform in Brooklyn. (Brooklyn: Brooklyn Tenement House Committee. 1916. Pp. 47.)

The three-family house problem together with various other local problems of construction and of inspection to be met by legislative changes is given consideration by the committee. The last twenty-eight pages contain a valuable statistical study of "Land overcrowding in Brooklyn," by Herbert S. Swan. The tables deal with the density of population in different types of tenements, number of families per lot and per acre, and heights of tenements.

J. F.

Saving the children. (London: National Health Society. 1916. 1s.)

Social service organization in Ohio. (Columbus: State Board of Health. 1915.)

Includes a list of state organizations, with the purpose of each.

Women's Municipal League of Boston, Department of Housing bulletin, vol. VII, no. 3. (Boston: Woman's Municipal League. 1916. Pp. 79.)

This report is the outgrowth of many years of continuous and careful inspection of old dwellings by the Department of Housing of the Women's Municipal League. The interest of the department centers upon questions of sanitation and maintenance of dwellings, housing problems faced by health departments and not those of building or city planning departments. The report is written to arouse popular indignation and immediate action for betterment of the sanitary conditions. The illustrations of existing housing conditions are exceptionally well chosen.

J. F.

A year book of the church and social service in the United States. (New York: Federal Council of the Churches of Christ in America. 1916. Pp. 254. 50c.)

Insurance and Pensions

NEW BOOKS

ALEXANDER, W. *The successful agent, practical hints for the seller of life insurance*. (Chicago: Spectator Co. 1917. Pp. viii, 215. \$2.)

GEPHART, W. F. *Principles of insurance*. Vol. I, *Life*. Vol. II, *Fire*. (New York: Macmillan. 1917. Pp. xi, 385; xi, 332. \$1.50 each.)
To be reviewed.

HARBURGH, C. H. *The industrial claim adjuster*. (Chicago: Spectator Co. 1916. Pp. 129. \$1.)

JONES, J. P. *Workmen's compensation*. (Tucson: Univ. of Arizona. 1917. Pp. 19.)

Gives some comparative details of the provisions in the various states and a fuller outline of the Arizona law.

JOSEPH, E. S. *The Joseph system for keeping accounts and records of fire insurance agencies*. (Harrisburg, Pa.: Pub. House of United Evangelical Church. 1916. Pp. 13.)

POTTS, R. M. *Addresses and papers on insurance*. (Springfield: Printed by authority of the state of Illinois. 1917.)

An address on "The altruistic utilitarianism of insurance" which deals with the history and general theory of insurance is printed first in this collection and is followed by groups of addresses on mutual and fraternal insurance, workmen's compensation, life insurance, social insurance, vital conservation, fire insurance reform, and recommendations concerning insurance legislation.

SMITH, H. W. *Talks with life insurance agents*. (Chicago: Spectator Co. 1917. Pp. 153. \$1.50.)

WILSON, A. E. *Workmen's compensation and employers' liability acts*. (Chicago: La Salle Extension Univ. 1917. Pp. 86.)

Although issued as part of a "complete course of study of the

American law," this pamphlet, or treatise, as the author calls it, will not acquaint students with American liability and compensation law. It will serve better to help readers to their first and very general knowledge of workmen's compensation, as an economic or industrial system. But neither as economics nor as law is it highly satisfactory.

Somewhat serious errors of implication or direct statement are too frequent. The New York compensation statute is contrasted with those which establish insurance funds (62). Compensation and insurance of compensation are confused (64). It is stated that in Wisconsin "government insurance had been in effect for many years before the adoption of workmen's compensation" (66). Readers are given to understand that compensation awards are proportionate to wages everywhere except in Wyoming (75). And so on. Very little indeed is said about the liability laws, nothing, in fact, except as to their historical part in the development of workmen's compensation. Except for a fairly full enumeration of American cases raising questions of constitutionality (23-24), references to judicial interpretations of the compensation acts are few and not recent, being mostly to English cases taken at second-hand from an article in the *Harvard Law Review* of 1912 (71). The great body of recent American decisions is ignored almost entirely, no case later than 1914 being cited. It, therefore, is not surprising that there are misleading suggestions as to the meaning of the laws. The relations of the compensation commissions to the courts are described in three sentences.

All of the pages of the pamphlet would have been none too many for the subject. But half of them are wasted, no less than 32 being used for reprinting, without comment, the New York compensation act.

W. C. F.

Episodes of history in the stories of the United States and the Insurance Company of North America as bound up together in national achievement, 1792-1917. (Chicago: Donnelly. 1916. Pp. 96.)

National health insurance. Second annual report of the Medical Research Committee. (London: Wyman. 1916. 3s. 6d.)

Negligence and compensation cases annotated: New York workmen's compensation act and decisions of the state industrial commission (pp. 1163-1263); New Jersey workmen's compensation act and decisions of the courts of common pleas (pp. 1163-1227); Pennsylvania workmen's compensation act and decision of the workmen's compensation board (pp. 1163-1268); Decisions of the Ohio industrial commission (pp. 1163-1239); Illinois workmen's compensation act and decisions of the industrial board (pp. 1179-1280); Indiana workman's compensation act and decisions of the industrial board (pp. 1179-1264); Oklahoma appendix, being a common sense index to all negligence cases decided by the supreme court of Oklahoma and courts of the Indian Territory (pp. 1163-1219); California workmen's compensation act and decisions of the industrial board the industrial accident commission (pp. 1179-1324). (Chicago: Callaghan. 1917.)

Negligence and compensation cases annotated. Cumulative common sense index. Vols. I—X. (Chicago: Callaghan. 1917. Pp. 1133. \$5.)

Pauperism and Charities

NEW BOOKS

BOGEN, B. D. *The extent and scope of Jewish philanthropy.* (New York: Macmillan. 1917. \$2.)

HURRY, J. B. *Poverty and its vicious circles.* (London: J. & A. Churchill. 1917. Pp. xiv, 180. 5s.)

Socialism and Co-operative Enterprises

The Socialism of To-Day. A Source-Book of the Present Position and Recent Development of the Socialist and Labor Parties in All Countries, Consisting Mainly of Original Documents. Edited by WILLIAM ENGLISH WALLING, J. G. PHELPS STOKES, JESSIE WALLACE HUGHAN, and HARRY W. LAIDLER, and other Members of a Committee of the Interecollegiate Socialist Society. (New York: Henry Holt and Company. 1916. Pp. xvi, 642. \$1.60.)

The subtitle of this volume which reads, "A source-book of the present position and recent development of the socialist and labor parties in all countries, consisting mainly of original documents," is a more adequate description of the purpose and character of the book.

The first half of the book consists of a more or less exhaustive documentary narrative of the socialist movement throughout the world. The second half is devoted to a similar documentation of the programs and problems of the socialist organizations in the various countries.

In thus resorting to a documentary and statistical presentation of socialism, the authors, whether intended or not, have achieved, aside from the avowed purpose of an unbiassed and an uncritical study of socialism, the more important service of presenting the socialist movement not as a simple and unvarying article of faith adhered to by the so-called socialists and those in sympathy with them, but as a propaganda and a reform movement bearing all the marks and characteristics supplied by the varying needs and requirements of varying conditions and circumstances.

The method used for a long time and currently in academic treatments of social and economic problems has been to reduce, by analogy or otherwise, to simplest terms a conglomerate of incorrigible factors affecting those problems and thereby arriving

at broad generalizations or "universal" truths. Latterly, however, students have come to the realization of the fact that such broad generalizations are seldom warranted by the facts in the given case, and, what is still more important, that economic problems differ typically one from the other.¹

Any illusion that may still be entertained as to the international character of socialism should be dissipated on the most cursory review of the present volume. Socialism as a theoretical speculation has long ceased to hold the first place in the interest of the rank and file of its students and followers, and the zeal which its advocates and prophets still manifest in socialism is merely as a politico-reform movement and as such it must needs lose its erstwhile international character.

Of course, this is not to say that, for instance, the socialism of Germany does not bear any resemblance to that of the French—quite the contrary. But apparently there is still enough difference in local color to make one of the arch protagonists of German socialism bold to declare in favor of the German bureaucratic rule as against French republicanism (p. 20).

The Socialism of To-day, for the study of socialism as a politico-reform movement, is without much question an excellent handbook, but like other books of the same character it suffers somewhat from the faults of its qualities. In spite of the fact that socialism as a theory and philosophy has ceased to command first attention, yet the strength of socialism lies essentially in its philosophy and ideals. As such it is not amenable to demonstration by the enumeration of ambitious programs of social reform, still less by the recital of statistics on votes and population. For instance, the trend of state and federal legislation of the recent past has probably more to say concerning the weakness or strength of socialism in the United States than the fact that statistically the membership of the Socialist party has fallen off since 1912 (p. 191), or that in the same year the socialist vote was more than double that of 1908 (p. 196).

In spite of such discretionary discrepancies in the distribution of emphasis, for the more detailed and particularistic study of socialism in colleges and universities the book should find a preferential place among textbooks on socialism.

LEON ARDZROONI.

Fresno, California.

¹ Cf. R. F. HOXIE, "Trade Unionism in United States," *Journal of Political Economy*, March, 1914.

The State as Manufacturer and Trader. An Examination Based on the Commercial, Industrial, and Fiscal Results Obtained from Government Tobacco Monopolies. By A. W. MADSEN. (London: T. Fisher Unwin, Ltd. 1916. Pp. ix, 281. 7s. 6d.)

Mr. Madsen's investigation of the tobacco monopolies in France, Italy, Austria, Japan, Spain, and Sweden is searching but one sided. He analyzes the relation between the state and the tobacco growers, the factory employees, the wholesalers, the retailers and the consumers; he scrutinizes the manufacturing, the bookkeeping as well as the general business methods of these governmental concerns; he considers the quality and the assortment of the goods sold. An appendix of over sixty pages to which the author continually refers in the text contains many valuable statistical tables; these tables derived from official reports, indicate by countries the financial results of tobacco monopolies, the wages paid to factory operatives, etc.

The most important contribution to the subject made by the author is the establishment of the fact that the comparatively high profits credited to the French *Régie* as well as to some of the other tobacco monopolies are due not so much to the superiority of this system of taxation as to faulty methods of accountancy; many important expenses, such as rent on land and buildings, interest on capital invested in the enterprises, costs of administration, and insurance are not included in the balance sheets. The writer is most decidedly opposed to the state's engaging in any industrial activity which destroys competition and curtails the free play of initiative. His monograph is permeated with this negative attitude towards the encroachments of what he terms "collectivism" upon industry and commerce. All his facts and figures are arranged in support of this contention. The book seems to have been written not in a spirit of scientific inquiry but for the sole purpose of demonstrating the dismal failure of state monopolies as engines of taxation and as commercial enterprises.

Whether one agrees or disagrees with the attitude of the author towards state socialism, one is unfavorably impressed by the absence in his work of an impartial analysis of the testimonials presented, by the lack of a judicious weighing of arguments pro and con. Assuming that Mr. Madsen is correct in all that he says regarding the poor quality of French tobacco, may we not ask ourselves whether this necessarily indicates the inefficiency of the

state as a producer? May it not be that the inferior grades of tobacco offered to French consumers are due not to mismanagement under a collectivistic control of industry but to a deliberate policy on the part of the government to use poor raw materials in order to raise more revenue? One is inclined to doubt the validity of an attack against government ownership on social and economic grounds by taking as the basis of such an attack a study of the shortcomings of tobacco monopolies, which were created and have been kept up with one aim in view—the obtaining of a maximum of income with the least amount of expenditure.

SIMON LITMAN.

University of Illinois.

NEW BOOKS

FINN, J. J. *Operative ownership, a system of industrial production based upon social justice and the rights of private property.* (Chicago: Langdon. 1916. Pp. 301. \$1.50.)

LORIA, A. *Carlo Marx.* Profili, no. 43. (Genova: A. F. Formiggini. 1916. Pp. 69.)

MILLS, W. T. *Democracy or despotism.* (Berkeley, Cal.: International School of Social Economy. 1916. Pp. xiv, 246.)

Mr. Mills states in an original manner the case for complete democracy, political and industrial. He shows first that the United States is not a real democracy, pointing out the familiar conditions in industry and politics through which the popular will may be checked. The measures through which democracy is to be attained are universal political education; representation in legislative bodies of the economic interests of the people rather than of geographical divisions; social ownership and control of the means of production, transportation, and exchange; and the initiative, referendum, and recall. The ideal is a world democracy. The author's position is essentially that of the organized socialist movement, although in some details he is in opposition to the position officially taken by the American Socialist Party.

G. B. L. ARNER.

SNOWDEN, P. *Socialism and syndicalism.* The nations library, no. 4. (Baltimore: Warwick & York. N. d. 262. 40c.)

This book is a disappointment. Knowing the gifts of Philip Snowden as a parliamentary orator and party leader, one naturally expects in his writings some real contribution to radical thought, or at least originality of statement or spontaneity of style. Instead of this one finds a rather dull restatement of socialist philosophy along the usual propagandist lines, followed by a short unfavorable criticism of syndicalism. The bibliography is poorly chosen and

nowhere does the author reveal any familiarity with recent continental or American socialist literature.

G. B. L. A.

Statistics and Its Methods

NEW BOOKS

- BRENIER, H. *Essai d'atlas statistique de l'Indo-Chine française*. (Hanöi: Imprimerie d'Extrême-Orient. 1916. Pp. 256.)
- PÉRET, R. *La population, le budget, la fortune et la dette publiques de la France, de ses alliés et de ses ennemis avant la guerre. Aperçus statistiques*. (Paris: Alcan. 1917. Pp. 39. 1 fr.)
- TERMAN, L. M. *The measurement of intelligence*. (Boston: Houghton Mifflin. 1916. Pp. 363. \$1.50.)
- Census of manufactures. General totals for the United States by geographic divisions, states and industries, 1914, 1909, 1904, and 1899*. (Washington: Bureau of the Census. 1916. Pp. 26.)
- Ohio comparative statistics: cities, counties, schools, 1914*. (Columbus, O.: Auditor of State. 1917. Pp. 212.)
- Statistical notes on cereals. Studies on yield, trade, consumption and prices, with rates of ocean freight*. (Rome: International Institute of Agriculture. Bureau of Statistics. 1916. Pp. 82.)
- Statistical year-book of the province of Quebec*. (Quebec: Provincial Secretary's Department. 1916. Pp. 609, xii.)
- The story of the census: 1790-1916*. (Washington: Bureau of the Census. Pp. 38.)
- Resumen anual de estadística municipal (año XIII, 1915)*. (Montevideo: Intendencia Municipal. 1916. Pp. 392.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

The following documents have been published by the federal Bureau of Foreign and Domestic Commerce:

In the Special Agents Series:

- No. 126, *Textiles in Cuba* (pp. 56), by W. A. Tucker.
- No. 127, *Cotton Goods in British India: Part II, Bengal Presidency* (pp. 88), by Ralph M. Odell.
- No. 128, *Electrical Goods in Cuba* (pp. 40), by P. S. Smith.
- No. 129, *The Danish West Indies, Their Resources and Commercial Importance* (pp. 68), by H. G. Broek, P. S. Smith, and W. A. Tucker.
- No. 134, *Electrical Goods in Porto Rico* (pp. 16), by Philip S. Smith.

In the Miscellaneous Series:

- No. 46, *Russian Markets for American Hardware* (pp. 111), prepared under the supervision of Henry D. Baker, commercial attaché at Petrograd.
- No. 48, *Markets for American Hardware in Germany, the Netherlands, and Scandinavia* (pp. 126), prepared under the supervision of Erwin W. Thompson, commercial attaché.
- No. 49, *Markets for American Hardware in France, Algeria, and Morocco* (pp. 61), prepared under the supervision of C. W. A. Veditz, commercial attaché at Paris.
- No. 50, *Far Eastern Markets for American Hardware* (pp. 145), prepared under the supervision of Julian Arnold, commercial attaché at Peking.
- No. 51, *Lumber Markets of the Mediterranean Region and the Near East* (pp. 31), by Raphael Zon.

The United States Department of Agriculture has issued Bulletin No. 473, *Production of Sugar in the United States and Foreign Countries*, by Perry Elliott (Washington, Feb. 12, 1917, pp. 70); *Commercial Handling, Grading, and Marketing of Potatoes* (Nov. 1, 1916, pp. 40); *Statistics of Fruits in Principal Countries*, by H. D. Ruddimann (Feb. 14, 1917, pp. 40).

The Coöperative League of America (70 Fifth Ave., New York City) has for circulation various reprints dealing with consumers' coöperation and coöperative stores.

The Extension Service of the Massachusetts Agricultural College

has published a small pamphlet on the *Cost of Distributing Milk in Six Cities and Towns of Massachusetts* (Amherst, March, 1917, pp. 8). This investigation was undertaken by Professor A. E. Cance and Richard H. Ferguson, of the department of economics of the college. The cities chosen for the study are Amherst, Walpole, Haverhill, Pittsfield, Springfield, and Worcester. The average cost of preparing and retailing milk for 42 plants in Springfield and Worcester was 2.79 cents per quart for an average daily delivery of 165 quarts of retail milk per wagon. Among the conclusions to be noted is that there is a wide variation in cost and that there is no marked relation between cost and size of business.

Corporations

THE BROOKLYN EDISON CASE DECIDED. The Public Service Commission of New York, First District, on October 27, 1916, rendered the decision in the rate case instituted in July, 1912, against the Edison Electric Illuminating Company of Brooklyn. The decision, especially the opinion by Commissioner Hayward, should have considerable interest to students of economics and political science. Large financial interests are involved, and several important points of view are presented. Following is a brief analysis of the case.

The commission fixed the valuation of the property at \$22,000,000,000 and allowed a return of 7 per cent on the amount. It estimated the necessary annual operating expenses, including depreciation, uncollectible bills and taxes, at \$1,260,000, the return on investment at \$1,500,000, and the total revenue to be collected from the public at \$5,760,000. In 1915 the total revenue at existing rates amounted to \$6,927,000 placing upon the public an unreasonable charge of about \$1,500,000. The commission, therefore, ordered such reductions in rates as would fix the return on the investment at \$1,500,000 and would leave a reasonable reserve for contingencies.

Against the commission's valuation of \$22,000,000 the company claimed \$39,000,000, or \$17,000,000 in excess. This difference is due chiefly to overhead and so-called intangible items. As to the physical appraisal, the commission and the company were practically in agreement, except that the commission made a reduction for depreciation while the company argued against the deduction. In most of the disputed items, the difference was due largely to the fact that the commission allowed only actual expenditures as shown by records and accounts, while the company based its claim on hypothetical amounts or percentages supported by special calculations and opinion. Here we strike the usual difficulties besetting a rate case.

The more important disputed points of special interest are: (1) stock issued between 1880 and 1883 for licenses for the use of certain Edison patents; (2) stock issued for organization or promotion, not representing actual investment; (3) securities issued in connection with the consolidation of earlier companies into the present system; (4) charges that had been made to operating expenses but should properly have been placed to capital account.

In regard to the first point, the commission refused to include in the valuation intangible rights which presumably had expired and for whose amortization there had been sufficient income. If the licenses had been amortized, this cost would have automatically appeared among the property covered by the appraisal. As to the second point, the commission would not admit capitalization which did not represent actual investment; and all real investment, with reasonable allowance for organization expenses, was included in the appraisal or was otherwise provided for.

The third point is particularly important. Originally there were several lighting companies in Brooklyn, but by 1900 they had been combined into and have since constituted a single operating system. The consolidation was effected chiefly through merger, resulting in the retirement of old securities and the issue of new; the exchange was based chiefly on the relative earning power of the merging companies and the expected profits of the new organization. Naturally, therefore, a large increase in total capitalization took place without corresponding additional investment. Full interest, however, has been paid throughout on the bonds and, except for the early years of the new system, 8 per cent dividends on the stock. The question, then, was: How should the increase in capitalization be treated in the valuation on which to base future return? That the unified control and the resulting monopoly were a public gain, can scarcely be doubted. And, at least partly as a result of combination, sufficient savings were made to pay interest and dividends on the new securities. Further, the consolidation probably could not have been brought about without the increase in capitalization. The company, therefore, claimed the net addition as cost of consolidation, which was justified by the more economical operation and should be included in the valuation precisely as are all necessary organization expenses.

The commission did not allow the claim. It viewed the amount as a special monopoly value, which cannot be used as a basis for rate making. And, in harmony with this view, it took the strict position that a fair return rests on property devoted to public uses and not on

securities issued. The point involved, so far as the writer knows, was never before so definitely set forth and argued by a company; and the commission's view may therefore serve as a leading and commendable precedent.

Under the fourth point, the company claimed over four million dollars which had been charged to operating expenses but which under strict accounting rules should have gone to capital account. But since these items were included among expenses, they formed part of the computation on which the new rates are based; for the new rates are expected to be high enough to provide for all operating expenses and return on investment. If, then, the public is to pay all items classed by the company as operating expenses, it should not be compelled to pay also a return on some of the items on the ground of investment. Otherwise it would be contributing capital under the guise of expenses, and then also pay the company a return on the amount. If, however, the items had been included in the valuation, there would have been necessarily a corresponding reduction in the estimated operating expenses; then, while the consumers would pay a larger amount for return on investment, they would pay correspondingly less for operating expenses, and so would have the same total burden that they will have under the computations as made. The commission, therefore, did not consider it worth while to reconstruct the capital account and to modify the entire expense calculation accordingly. And, it should be added, the actual calculation followed the usual accounting practice. In a large proportion of the items it would be impracticable to make the charges to capital account.

The chief basis of calculation was actual or installation cost, both as to physical property and overhead, with deduction for depreciation. In the matter of land, however, present value was used in line with the definite decisions in the Consolidated Gas case and the Minnesota rate cases. In the review of rate cases the courts usually regard reproduction cost, with deduction for depreciation, as the equivalent of value. The actual cost basis in the present case, therefore, is a departure from the ordinary procedure. The company agreed to the method, and it is pointed out in the opinion that the valuation is greater than would have been obtained under reproduction cost. But in most of the discussion the language does not draw attention to the special basis used. Much is said about capitalization entitled to return and about actual investment. The intention seems to have been, or there is a suggestion to that effect, to keep within the broad valuation formula of *Smyth v. Ames* and the usual dicta of the courts, but nevertheless to help in the

establishment of actual cost as the basis of valuation for rate making. The case was admirably suited for this purpose.

A final point which seems especially worth considering is the commission's procedure in fixing service rates. The general ideal of commission rate making has been cost of service, including in the cost all operating expenses and a fair return on investment. In a complex utility, as in the present case, the cost can be determined only as a whole, and not for different classes of service. Too many of the expenses are joint, and do not permit even an approximate allocation to classes of service. And a single rate equal to average cost simply would not work. Differential rates must be permitted, so that the commissions always face the question in a case of how practically to fix the differentials.

In the present case, the company's existing rates varied from eleven cents per kilowatt hour for small consumers to less than two cents for large consumers. The commission assumed that in general the lower classes of rates were not excessive and then ordered such reductions in the higher classes that the new rates should produce just enough revenue to bring the total revenue from all classes up to the estimated total cost. Care, however, was taken that the smaller consumers should pay the direct expenses involved in their service, and the company was ordered to rearrange the lower rates on a more systematic plan so as to eliminate discriminations.¹

While the commission did not set forth any definite formula to be followed hereafter in the fixing of rates, it, nevertheless, did mark out or suggest an interesting procedure in dealing with complex utilities whose costs in providing service are largely joint. The total revenue from all classes must, of course, be equal to the total cost—including both operating expenses and return on investment. But the lower rates for large consumers are fixed according to the value of the service, *i.e.*, according to strict commercial considerations. Higher rates, applying to small and middle consumers, then need to furnish only the additional revenue required to make up the total costs. To the writer, this appears as a reasonable policy. The larger consumers can protect themselves provided that discrimination within a class is not permitted and arbitrary changes are not allowed. It is the smaller consumers who need such relief as may be granted.

¹ For the higher class rates, the commission fixed eight cents per kilowatt hour for the first two hours average daily use per month of the estimated maximum demand of the consumer; six cents for the second two hours average daily use per month, and four cents for the excess over four hours average daily use per month. The old rates included the supply of lamps, while under the new, the consumer furnishes his own lamps; or the company may charge one half cent per kilowatt hour for lamp service.

Here we come upon a large question of social policy. If a company is making excessive earnings, is it not reasonable, so far as possible, to relieve the poorer classes in the community? As applying to local utilities the rate schedules may for the most part be fixed so as to relieve the poorer consumers, though, of course, the dividing line between where relief should be granted and where not, would have to be made more or less arbitrarily. But as applying to railroads, manifestly no such policy could practically be carried out; the business is too complex. Specific costs for each class of service could not be determined. Differential rates would have to be permitted, and the basis of the differential would simply have to be the value of service. If, then, the return on investment is to be limited to a fair rate, the net earnings above the total costs would best be taken for general public purposes, instead of being granted as relief to the smaller consumers. This point, however, is not treated by the commission. Yet it seems involved in any comprehensive rate theory that follows the order of the present case.

JOHN BAUER.

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Telegraph Competition vs. Government Ownership is a letter by Clarence H. McKay, president of the Postal Telegraph-Cable Co., to Senator Newlands, showing the financial disadvantage and loss that would result if the government should take over the telegraph system of the United States.

Bearing upon the subject of public ownership is the report made to the House of Representatives (July, 1916) on *Municipal Ownership of Street Railways in the District of Columbia* (64 Cong., 1 Sess., Report No. 952). The majority report covers 26 pages, and the minority report 19 pages.

The *Report of the Public Service Commission of Maryland for 1916* (Baltimore, 1917, pp. 829) contains the decisions of the commission, among which is especially to be noted the investigation of the rates and charges, property and affairs of the Havre de Grace and Perryville Bridge Co., filed September 1, 1916 (pp. 417-453). Another case involving the subject of valuation is the Chesapeake and Potomac Telephone Company (pp. 143-214).

The solicitors, Cassoday, Butler, Lamb and Foster, for the complainants in the case of William A. Read *v.* Central Union Telephone Co. have reprinted *The Opinion Rendered by Judge Dever January 20,*

1917, in the Superior Court of Cook County, Illinois. This is an interesting case bearing upon the history and development of the telephone industry.

A revised edition of the *Laws of Maryland Relating to Business Corporations* (Baltimore, March, 1917, pp. 73) has been received from the State Tax Commission of Maryland.

Among the railroad pamphlets recently received are: *Some Conditions which the Railroads Face at the Opening of 1917* (Feb., 1917, pp. 19), by A. J. County, vice-president of the Pennsylvania Railroad Company; *The Shippers; Their True Relation to the Railway Equipment Company* (pp. 16), an address delivered December 15, 1916; *Some Business Aspects of the Railroad Problem* (pp. 12), by Walker D. Hines, chairman of the board of directors of the Atchison, Topeka and Santa Fe Railroad Company, delivered January 31, 1917.

Labor

Relating to the eight-hour day railroad dispute of last summer are the briefs before the Supreme Court of the United States presented during the October term, 1916. Among these are to be noted: *Brief for the United States* in the case of Francis M. Wilson v. Receivers of the Missouri, Oklahoma and Gulf Railway Co. (pp. 18); *Summary of Appellant's Arguments* (pp. 96); *Supplemental Memorandum for Appellant* (pp. 4); *Brief for the Appellees*, John G. Johnson, Arthur Miller, and Walker D. Hines (pp. 120); *Supplemental Brief of the appellees* (pp. 17); *Appellees' Reply to Supplemental Memorandum for Appellant* (pp. 7); *Appendix A to Brief for Appellees*, dealing with the methods of reckoning compensation of train-service employees. With these is the transcript of record filed November 28, 1916 (pp. 54).

The Bureau of Railway Economics has prepared a typewritten list of references to books and articles on the Adamson law of September 19, 1916, and also a list of references relating to the eight-hour working day and to limitations of working hours in the United States with special reference to railway labor.

There has been received from the Bureau of Information of the Eastern Railways (Grand Central Terminal, New York City) two volumes relating to the *Proceedings in the Arbitration Case Between the Railroads and the Switchmen's Union of North America*. The first volume contains the testimony taken November 13-24, 1916 (pp. 801). The second volume contains the testimony taken November 27-

December 8, and also the briefs of the Switchmen's Union and the railways, with the award (pp. 803-1495, 44, 22, 10).

The Minimum Wage Commission of Massachusetts, in Bulletin No. 13 (Dec., 1916) deals with *Wages of Women in Men's Clothing and Raincoat Factories in Massachusetts* (Boston, pp. 60). This commission has also published its *Fourth Annual Report* for 1916 (pp. 55).

From the Cleveland Chamber of Commerce has been received a pamphlet on *Industrial Profit Sharing and Welfare Work* (April, 1916, pp. 85), which contains brief summaries of the operations of a large number of manufacturing and distributing plants.

The *Report of the Industrial Accident Commission of California for 1916* (pp. 152) contains interesting diagrams and charts.

Money, Prices, Credit, and Banking

From the Federal Farm Loan Board have been received pamphlets entitled *New Mortgages for Old* (second edition, Feb. 9, 1917, pp. 13); *How Farmers May Form a National Loan Association* (1916, pp. 8); and *The Farm Loan Primer* (1916, pp. 12).

The federal Department of Agriculture has published, as Farmers' Bulletin No. 792, *How the Federal Loan Act Benefits the Farmer* (1917, pp. 12), by C. W. Thompson.

The Extension Service of the Massachusetts Agricultural College has published *National Farm Loan Associations, What They Are, How They May Be Formed, The Benefits to be Derived* (Amherst, 1917, pp. 16); and *By-Laws for National Farm Loan Associations* (pp. 4).

The State Colonization and Rural Credits Commission of California has issued Circular No. 1 on *Land Settlement and Rural Credits; The Need for an Investigation in California* (Sacramento, 1916, pp. 8); and *Report of the Commission on Land Colonization and Rural Credits* (Nov. 29, 1916, pp. 120), in which there is a chapter on "Methods of land settlement enterprises and experiences of settlers"; a second on "Problems of tenantry and farm labor"; and a third on "Methods and policies of other countries."

The Mechanics and Metals National Bank (New York City) has published a circular on *Proposed Amendments to the Federal Reserve Bank*.

A. B. Leach & Co., of New York, have published a pamphlet on foreign exchange, *To-day's Topic, To-day's Opportunity*, in which a con-

siderable amount of data relating to exchange rates is summarized and tabulated.

The *Annual Report of the Jewish Agricultural and Industrial Aid Society*, 1916 (174 Second Ave., New York), notes the expansion of the work of this society. Virginia has been added to the field of operations of the loan department. Out of \$2,065,000 loaned, the loss thus far during seventeen years has been \$64,000, or a little over 3 per cent.

The Massachusetts Special Commission on the Cost of Living has made a report on *Bread* (Jan. 17, 1917, pp. 17); on *Relation of Transportation to Prices* (Jan. 22, pp. 6); on *Department Stores* (Jan. 23, pp. 3); and a *Final Report* (Feb. 15, pp. 14).

The *Proceedings of the Fifth Annual Convention of the Investment Bankers Association of America held October 2, 3, and 4, 1916* (Chicago, 111 West Monroe St., 1916, pp. 293), besides the verbatim report of proceedings, includes a paper on the tax situation in Ohio, New York, and Massachusetts and reports of the public utility securities commission and the municipal securities commission with a proposed model municipal bond act.

Among banking documents are to be noted:

Seventh Annual Report of the Superintendent of Banks in California, 1916 (Sacramento, pp. 611).

Statement Showing the Condition of Illinois State Banks, November 18, 1916 (Springfield, pp. 423).

Fourth Annual Report of the Banking Commissioner of Kentucky, 1915-1916 (pp. 149).

Twenty-fifth Annual Report of the State Banking Board of Nebraska (1916, pp. 421).

Annual Report of the Board of Bank Commissioners of New Hampshire (Concord, 1916, pp. 388).

Report on Banks of Deposit and Discount, and Private Banks, by the Superintendent of Banks of the State of New York (Albany, pp. 460).

Tenth Annual Report of the State Bank Examiner of the State of Washington, December 31, 1916 (Olympia, 1917, pp. 42). With this is a separate containing the new banking code approved March 10, 1917.

Public Finance

PITTSBURGH COMMITTEE ON TAXATION STUDY. The extension of the functions of cities and the insistence upon the more adequate perform-

ance of old functions are putting heavier pressure upon municipal revenues. City officials are feeling the necessity of increasing revenues by searching out new sources of income or by utilizing more fully those already existing and of adjusting more equitably the burdens of taxation among the taxpayers. In pursuance of these objects the city council of Pittsburgh in 1916 authorized the appointment of a Committee on Taxation Study to investigate the tax system and to submit recommendations to the council. Mr. William Price was chairman of the committee and Professor John T. Holdsworth was chairman of the subcommittees on planning and formulation of the report. The results of the investigation have just been published in a pamphlet which contains matters of interest to other cities. (*Report of the Committee on Taxation Study to Council of the City of Pittsburgh, Pennsylvania, 1916*, pp. 105.)

The limits of this review preclude as full a discussion of the contents of the report as its importance would justify. The committee recommends first the retention of the so-called graded tax on real estate which provides for the gradual reduction of the rate upon buildings until it becomes equal to one half of the rate on land. The economic results of this law have been obscured by the effects of other recent changes in the taxation of real estate in Pittsburgh and the committee believes that the experiment "should be given full and fair trial."

In discussing the question of local administration the committee urges the adoption of a more scientific and equitable system. "A mere statement of the way properties are assessed indicates: first, wasteful duplication of work; and second, the complete lack of modern methods, rules and equipment for arriving at uniform and equitable assessments." The committee favors the consolidation in one board of the duties of assessing all property within the county; the consolidation in one office of the duties of collecting city and county taxes; the substitution of annual for triennial assessments; the adoption of modern methods of assessment including the section, block, and lot system; improvement in the collection of delinquent taxes; and greater publicity in assessment and taxation matters.

The report relates the question of "zoning" to taxation by showing that public regulation of the use of real estate is necessary "to prevent the needless destruction of these values" and that the absorption of suburban districts "whose inhabitants make their living in the city, but now pay no taxes for the city privileges which they enjoy" would increase city revenues. It also favors a constitutional amendment and statutes authorizing excess condemnation.

Tables in the report show that almost one fifth of the value of real estate is exempt from taxation. The committee criticises the existing method of granting exemptions and discusses the economic basis of exemption and the lines along which a "radical revision of the whole exemption system" may be attained. It also advocates the taxation of the local real estate of public utility corporations, now exempt, at the same rate as other real estate upon assessments made by state officers.

It recommends that special services rendered by the city to private concerns or individuals should be made self-sustaining; that larger revenues should be obtained from the rental and use of city property and that the automobile license tax should be increased by 50 per cent and that 30 per cent of the total proceeds should be distributed to the city.

The abolition of the following impositions is recommended: "the mercantile license tax, which is wrong in principle and necessarily bad and costly in practice;" the occupation tax, "which costs more to assess and collect than the amount of the collections"; and the personal property tax as soon as a graduated income tax, or a graduated direct inheritance tax, or both, can be secured.

The committee approves the present practice of deriving state revenues from the tax on corporations but suggests some desirable changes.

The committee investigated the operation of the law imposing a four-mill tax on intangibles and concludes that there is much evasion and that the tax as administered is inequitable. While granting that a more efficient collection of the tax would result from a greater centralization of assessments, it holds "that even with this kind of centralization the present system of taxing intangibles in this state cannot be administered to accomplish results as fair and satisfactory as can be secured by means of a graduated income tax." This discussion and the conclusion of the committee will be of especial interest to those persons in other states who are seeking a substitute for the personal property tax.

Probably the most important recommendations of the committee are those relating to the taxation of inheritances and incomes. In a concise but convincing way it is urged that the present law taxing collateral inheritances should be extended so as to include the taxation of *direct* inheritances and that the "tax rate should be made progressive, both with respect to the size of the inheritance and with respect to the degree of relationship of the heir." The committee further recommends the adoption of a state income tax with the following features: progressive

rates; low exemption; "information at the source"; the inclusion at the outset of individuals only; the application of the personal property tax paid by an individual on his income tax; the distribution of the proceeds (excepting an amount to cover expenses of administration) to the local governments; and a tax commission or commissioner to administer the law and to appoint income assessors.

The appendix contains an interesting discussion of the income tax with an analysis of the tax laws of Wisconsin and Massachusetts and the proposed law in New York, an instructive account of the tax system of Pennsylvania, and an explanation of the New York system of assessing real estate.

WILLIAM A. RAWLES.

Indiana University.

The *Governor's Budget Estimate* of the State of New York, transmitted January 3, 1917 (pp. 75), marks a new step in state finance, being authorized by the act of 1916.

The New York State Tax Bulletin, Vol. I, No. 5, issued by the State Tax Department, contains a *Review of Local Assessments, 1916* (Nov., 1916, pp. 66).

The *Twenty-Sixth Annual Report of the New York Tax Reform Association* gives a summary of tax legislation in New York during the year 1916 (29 Broadway, pp. 8).

The two lectures which William A. Prendergast, Comptroller of the City of New York, delivered at New York University in March, 1916, on *Financing the City of New York*, have been reprinted as a pamphlet (pp. 41). This is a valuable contribution to the subject of municipal finance, making a useful generalization of the principal facts as to the budget, borrowing policy, debt, and sinking funds.

The Minnesota Tax Commission has published advance sheets on *Comparative Cost of State Government*, by Professor R. G. Blakey (St. Paul, 1916, pp. 78).

The *Fifth Annual Report of the Colorado Tax Commission* (Denver, 1916, pp. 264) refers to the unsuccessful efforts to abolish the Colorado Tax Commission, and contains the report at length of the survey committee of state affairs which engaged Dr. Robert M. Haig, of Columbia University, to make a survey and appraisal of the revenue system of the state. This is an interesting summary of more than local value.

The *Fifth Report of the Tax Commission of Kansas* (Topeka, Jan. 9, 1917, pp. 83) recommends an amendment to the legacies and successions tax law, the establishment of county assessors, and the collection of statistics of mortgage indebtedness. On pages 22-53 is reprinted an address by M. M. Flannery before the National Tax Association on "Amendments to the tax laws of other states," giving rates and exemptions. On pages 55 and 56 are tables, showing the methods of taxing intangible property in the different states. Pages 57-68 deal with the tax on legacies.

The *Report of the Kentucky Tax Commission*, a special commission appointed in 1916 (Frankfort, 1916, pp. 42), recommends the appointment of a central board or tax commission which should be responsible for the assessment of all property. The present method of equalization is regarded as defective. The draft of the act to carry out this suggestion, as well as other recommendations, is included in this report.

The *Annual Report of the State Tax Commission of New York for 1916* (Albany, 1917, pp. 81) notes that the increase in assessed values of real property amounted to over \$328,000,000 during the year, and it is believed that this justifies the retention of the present policy.

The *Ninth Report of the Board of State Tax Commissioners and State Board of Assessors of Michigan* (Lansing, 1916, pp. 89) describes the progress which is being made in cash value assessments.

The *Seventh Report of the Tax Commissioner of Texas, 1915* (Austin, pp. 54), contains a summary of the constitutional provisions of the state in regard to taxation.

The *Biennial Report of the Commissioner of Taxes of Vermont* (Rutland, 1916) is almost exclusively devoted to statistical tables.

The *Sixth Biennial Report of the State Board of Tax Commissioners of Washington* for 1916 (Olympia, 1916, pp. 139) deals (pp. 7-10) with the workings of the inheritance tax of that state. Several pages are devoted to the subject of valuation of public service properties. The commission recommends that under the general property tax, property should be valued at its full market value.

The *Eighth Biennial Report of the Wisconsin Tax Commission* (Madison, 1916) reviews the working of the income tax (ch. 3); recommends the substitution of county for local assessors, and the repeal of the personal property tax; discusses municipal accounting and auditing (ch. 7). Chapter 8 deals with the subject of government expenditures with per capita tables worked out.

Among other tax documents and pamphlets to be noted are: *Report of the State Board of Equalization of California for 1915-1916* (Sacramento, pp. 148); *Report of the Committee on Exemptions of Real Property made at the Seventh New York State Conference on Taxation held at Rochester January 11, 1917* (pp. 26); *The Federal Estate Tax Law and Regulations* (New York Guaranty Trust Company, pp. 53); and *The Excess Profits Tax Law* (New York Guaranty Trust Company, pp. 18).

Insurance

The Report of the Nevada Industrial Commission, 1913-1916 (Carson City, 1917, pp. 107) reviews the administration of the Nevada industrial insurance act for a period of three years.

Bulletin No. 3 of the Workmen's Compensation Bureau of Pennsylvania contains its *Rules and Rulings* (Harrisburg, 1916, pp. 32).

The following insurance pamphlets have been received from the Insurance Society of New York: *The Commission Clause*, by William J. Greer (1917, pp. 18); *Use and Occupancy; Profits and Commissions; Rents and Leasehold Insurance*, by L. Levy (1917, pp. 15); *Cancellation and Substitution*, by M. Conboy (pp. 33).

The subject of Social Insurance is discussed in pamphlets by Edson S. Lott, President of the United States Casualty Company; *Politics v. Workmen's Compensation Insurance* (1916, pp. 12); *Fallacies of Compulsory Social Insurance*, an address delivered before the American Association for the Advancement of Science, December 28, 1916 (pp. 11); *Different Methods of Workmen's Compensation Insurance* (1916, pp. 14).

PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Theory

(Abstracts by W. M. Adriance and A. N. Young)

CHAPIN, F. S. *The experimental method and sociology*. Sci. Mo., Feb., 1917. Pp. 12.

The first of a series. The present article deals with the utopian community experiments at New Harmony, Brook Farm, etc.

CLARK, J. M. *Business acceleration and the law of demand: a technical factor in economic cycles*. Journ. Pol. Econ., Mar., 1917. Pp. 19.

A study of the way in which variations in the demand for finished product are reflected back to (more extreme and sudden) variations in demand for "equipment" or "means of production." In the mechanics of this latter demand Professor Clark finds a significant part of the explanation of crises.

ELLWOOD, C. A. *Objectivism in sociology*. Am. Journ. Sociol., Nov., 1916. Pp. 16.

A criticism of the objectivist position that "the scientist has no right to explain human phenomena by, or take refuge in, the mind." This is not accepted by Professor Ellwood, who holds that "to describe social processes partly in objective and partly in subjective terms, is exactly the procedure which we must adopt."

FISHER, I. *The rate of interest after the war*. Ann. Am. Acad., Nov., 1916. Pp. 8.

Will tend to rise, both in Europe and in the United States.

FITE, W. *Moral valuations and economic laws*. Journ. Philosophy, Psychology & Scientific Methods, Jan. 4, 1917. Pp. 23.

The inaugural lecture of Professor Fite as professor of ethics at Princeton University. Emphasis is placed upon personal, moral, and social factors in our economic life, as contrasted with the alleged domination of entirely impersonal economic "laws."

JEVONS, H. S. *The relation of economic science to social progress*. Indian Journ. Econ., Apr., 1916. Pp. 38.

The substance of a lecture delivered at the central Hindu College, Benares. An application of economic reasoning to Indian problems.

MITCHELL, W. C. *Wieser's theory of social economics*. Pol. Sci. Quart., Mar., 1917. Pp. 32.

A review of Wieser's *Theorie der Gesellschaftlicher Wirtschaft*, published in 1914. The first review of this book available for English readers. Professor Mitchell says that the book "sums up, systematizes and extends the doctrines previously worked out by the author, his master and his fellow disciples," and that "in the literature of the Austrian School it merits the place held by Mill's *Political Economy* in the literature of the Classical School."

FIGOR, A. C. *Interest after the war and the export of capital.* Econ. Journ., Dec., 1916. Pp. 12.

Interest rates may be expected to be somewhat higher even if export of capital is restricted or prohibited. If export is left free, rates are likely to be much higher.

PUCINI, R. *L'etica religiosa e l'economia sociale.* Riv. Intern., Nov., 1916. Pp. 19.

VINER, J. *Some problems of logical method in political economy.* Journ. Pol. Econ., Mar., 1917. Pp. 25.

Advocates the joint use of induction and deduction in economic reasoning.

Problems of economic instruction. Papers read at the eleventh conference of the Western Economic Society, held at the University of Chicago, November 10 and 11, 1916. Journ. Pol. Econ., Jan., 1917.

Includes the following articles: "Courses in economics and methods of instruction at Northwestern University" (pp. 10), by F. S. Deibler, which gives special attention to the work in commerce, and to the seminar method of developing the research spirit on the part of selected seniors; "The place of economic theory in graduate work" (pp. 9), by J. A. Field, which asserts that economic theory should not be a thing apart from other economic studies but should mean "the organization of scientific knowledge" and not "the impalpable substance of abstruse reflection"; "Graduate work in economics" (pp. 7), by W. F. Gephart, which claims that training in organization of material and in generalization is more important than mere fact gathering; "The relation of law and economics" (pp. 11), by E. A. Gilmore, which shows that, because the sciences of law and economics are so intimately related, students of economics should have broader training in the basic subjects of law; "The Amherst program in economics" (pp. 13), by W. H. Hamilton, which is a broad discussion, in outline form, of the program in economics in its relation to the college curriculum as a whole; "The relation of engineering to economics" (pp. 5), by J. F. Hayford, which states that a general course in economics, not specially adapted, broadens the field of outlook of the engineering student; "Economics and the science of business" (pp. 5), by E. D. Howard, which maintains that theoretical economics is not the basic science of business; "Graduate work in preparation for teaching" (pp. 7), by F. L. McVey, the theme of which is that less attention be given to mere descriptive material and more to history, contact with practical problems, and "the essential groundwork of theory"; "A balanced curriculum in business education" (pp. 22), by Leon C. Marshall, which presents the belief that the elementary courses in economics should be followed by a series of "functional immediate courses," then by advanced courses, business administration being stressed throughout. "Business training—if the economist chooses frankly to coöperate with it—can give to the economist the community respect he desires."

Economic History, United States

(Abstracts by E. L. Bogart)

ALDRICH, O. W. *Slavery or involuntary servitude in Illinois prior to and after its admission as a state.* Journ. of Ill. State Hist. Soc., July, 1916. Pp. 17.

A discussion primarily of the constitutional and legal provisions concerning slavery.

BAKER, H. E. *The negro in the field of invention.* Journ. Negro Hist., Jan., 1917. Pp. 17.

An interesting account of the contributions made by negroes to inventions, by an assistant examiner in the United States patent office.

BARBA, P. A. *The General Swiss Colonization Society.* German-American Annals, Dec., 1916.

The society was organized in Cincinnati in 1857 and purchased 4000 acres of land in Indiana, where it laid out Tell City.

BRADLEE, F. B. C. *The Eastern Railroad: an historical account of early rail-roading in eastern New England.* Essex Inst. Hist. Coll., Jan., 1917.

A continuation of an interesting and valuable study.

CARROLL, M. P. *The influence of missions on present-day California.* Univ. Calif. Chronicle, Oct., 1916.

CLARK, D. E. *Recent liquor legislation in Iowa.* Iowa Journ. Hist. & Pol., Jan., 1917. Pp. 29.

A short historical account of temperance legislation since 1850, but with special emphasis on the period since 1909.

COONC, E. A. *Reminiscences of a pioneer woman.* Wash. Hist. Quart., Jan., 1917. Pp. 9.

Covers the period from 1847 to about 1884.

COTTERILL, R. S. *Southern railroads and western trade, 1840-1850.* Miss. Valley Hist. Rev., Dec., 1916.

An account of the unsuccessful efforts of the South to divert the growing western trade from the North Atlantic ports.

COULTER, E. M. *Effects of secession upon the commerce of the Mississippi Valley.* Miss. Valley Hist. Rev., Dec., 1916.

DEWAVRIN, M. *Les Etats-Unis d'Amérique et le conflit européen: le mouvement économique.* Rev. Pol., Oct. 15, 1916. Pp. 28.

An account of the industrial, commercial, and financial developments in the United States during the years 1914-1916.

DODD, W. E. *The social and economic background of Woodrow Wilson.* Journ. Pol. Econ., Mar., 1917. Pp. 25.

The combination of the West and South which elected Wilson simply repeats a century old protest against favors to special interests.

DOWD, J. *The African slave trade.* Journ. Negro Hist., Jan., 1917. Pp. 20.

A brief account of the slave trade from the beginning of the eighteenth century to the present day.

FOLSOM, J. F. *The beginnings of the Morris and Essex Railroad.* Pro. of N. J. Hist. Soc., Apr., 1917.

FOSTER, H. M. *Memories of the national road.* Ind. Mag. of Hist., Mar., 1917. Pp. 8.

An account of the road in Indiana from 1827 to 1847.

FREEMAN, J. E. *A century of sugar refining in the United States.* Autumn Leaves, Nov., 1916.

HANSEN, F. *The great handcart train from Iowa City to Salt Lake City.* Journ. of Hist., Oct., 1916.

HEBARD, G. R. *The first white women in Wyoming.* Wash. Hist. Quart., Jan., 1917. Pp. 4.

They were the wives of missionaries who went out there in 1836.

HENDERSON, R. *Richard Henderson: the authorship of the Cumberland compact and the founding of Nashville.* Tenn. Hist. Mag., June, 1916.

HIGGINS, F. *The wilderness road.* Ind. Mag. of Hist., Mar., 1917. Pp. 5.
A slight sketch.

HOBBS, F. W. *Textiles—the backbone of New England.* Bull. Nat. Assoc. Wool Mfrs., Jan., 1917. Pp. 26.

A popular address.

HOLMER, C. N. *The gold fever of '48 and '49.* Mag. of Hist., Sept.-Oct., 1916. Pp. 14.

Consists chiefly of biographical notes about prominent men concerned in the gold discoveries.

LAYTON, J. E. *Sources of population in Indiana, 1816-1850.* Bull. of Ind. State Library, Sept., 1916.

LENHART, J. *The Capuchins in Acadia and northern Maine (1632-1655).* Rec. of Am. Catholic Hist. Soc., Mar., 1917. Pp. 18.

Concluding instalment.

LITTELL, H. *Development of the city school system of Indiana, 1851-1880.* Ind. Mag. of Hist., Dec., 1916.

Concluding instalment.

LONGMIRE, D. *First immigrants to cross the Cascades.* Wash. Hist. Quart., Jan., 1917. Pp. 8.

Account of an expedition made in 1853.

MARSHALL, T. M. *Commercial aspects of the Texas Santa Fé trade.* S. Hist. Quart., Jan., 1917. Pp. 19.

Deals with the early forties.

NOYES, A. D. *United States, a financial power after the war.* Scribner, Dec., 1916.

A thoughtful statement of the effects of the European war upon the financial status of the United States.

OLNEY, W., JR. *The Western Pacific Railroad* Univ. Calif. Chronicle, Oct., 1916.

SMITH, J. E. *A pioneer of Spokane county.* Wash. Hist. Quart., Oct., 1916.
Reminiscences by the author.

TAYLOR, R. G. *Industrial history in the standard high school course.* Hist. Teachers' Mag., Nov., 1916.

THOMPSON, W. M. *When Washington toured New England, 1789.* Mag. of Hist., Sept.-Oct., 1916. Pp. 11.

The purpose of this tour, according to Washington, was "to acquire knowledge of the face of the country, the growth and agriculture thereof—and the temper and disposition of the inhabitants towards the new government."

Reminiscences of John Davidson, a Maine pioneer. N. E. Hist. & Geneol. Register, July, 1916.

Economic History, Foreign

(Abstracts by Clive Day)

ABBOTT, E. *Charles Booth, 1840-1916.* Journ. Pol. Econ., Feb., 1916. Pp. 6.

CLAPHAM, J. H. *The Spitalfields acts, 1773-1824.* Econ. Journ., Dec., 1916. Pp. 12.

Organization and regulation of the silk manufacture.

COLANÉRI, A. *La situation industrielle et sociale en Angleterre.* Rev. Sci. Pol., Dec., 1916. Pp. 15.

Summary of a recent study of the Garton Foundation.

DORLAND, A. G. *The royal disallowance in Massachusetts.* Bull. Depts. Hist. & Pol. Sci., Queen's Univ., Jan., 1917. Pp. 33.

An essay in constitutional history with some economic bearings.

HUNTINGTON, E. *Climatic change and agricultural exhaustion as elements in the fall of Rome.* Quart. Journ. Econ., Feb., 1917. Pp. 35.

An interesting and able contribution, suggestive rather than conclusive.

MCRBERTS, S. *Russia and the United States.* Econ. Wld., Jan. 27, 1917. Pp. 4.

NARODNY, I. *Russian markets offer a great opportunity for American foreign trade.* Journ. Am. Bankers Assoc., Mar., 1917. Pp. 4.

NARODNY, I. *Russian economic and financial conditions under the new régime.* Journ. Am. Bankers Assoc., Apr., 1917. Pp. 4.

DE NOUVION, G. *La Japon. Sa situation financière et économique (1915-1916).* Journ. des Econ., Feb. 15, 1917. Pp. 4.

PRICE, L. L. *The economics of the war and its sequel.* Econ. Journ., Dec., 1916. Pp. 15.

A review of various contributions.

RAFFALOVICH, A. *Les relations économiques et financières avec la Russie.* L'Econ. Franç., Jan. 6, 13, 1917. Pp. 2, 2.

RAFFALOVICH, A. *Revue du marché financier en 1916.* Journ. des Econ., Jan., 1917. Pp. 18.

SCHLESINGER, A. M. *The uprising against the East India Company.* Pol. Sci. Quart., Mar., 1917. Pp. 19.

A paper read at the Cincinnati meeting of the American Historical Association describing the American revolt of 1773.

SCOTT, W. R. *The mystery of the medieval draper.* Econ. Journ., Dec., 1916. Pp. 6.

Review of Johnson's *History of the London Drapers.*

TURNONI, C. B. *Relazioni fra sconto e prezzi durante i cicli economici.* Giorn. d. Econ., Nov., 1916. Pp. 54.

A study of rhythmic changes in cost of production and their bearing upon prices, profits, and the discount rate.

WALLIS, B. C. *Central England during the nineteenth century: the breakdown of industrial isolation.* Geog. Rev., Jan., 1917. Pp. 24.

A study in the distribution of population as influenced by industrial development, with maps and charts.

WRIGHT, A. *The unused capital of the Empire.* Finan. Rev. Rev., Dec., 1916. Pp. 16.

A project for the development of investment by the natives of India. *Mexico: a review and a forecast.* Bull. Pan Am. Union, Jan., 1917. Pp. 17.

Post-Kaiser economics. Scottish Bankers Mag., Jan., 1917. Pp. 12.

A review of Kirkaldy's *Labour, Finance and the War.*

Commerce

AUSTIN, O. P. *The part taken by manufactures in our exportations.* Econ. Wld., Feb. 17, 1917.

BENEDICT, W. *The Pacific mail.* Forum, Nov., 1916.

CUSHING, G. H. *The coal problem emphasized.* Am. Rev. Rev., Feb., 1917.

GIDE, C. *The commercial policy of France after the war.* Econ. Journ., Dec., 1916.

GOEMANN, W. P. *Coöperative selling vs. the middleman in the upbuilding of our foreign commerce.* Econ. Wld., Apr. 21, 1917. Pp. 5.

HERNDON, J. C. *South Carolina's bureau of marketing.* Mo. Rev. U. S. Bur. Lab. Stat., Jan., 1917.

MATTHEWS, J. *Credit conditions in South American countries.* Journ. Account., Dec., 1916.

TRUENMAN, C. D. *The Great Lakes, their commerce and equipment.* Commerce, Jan., 1917.

WELD, L. D. H. *Marketing functions and mercantile organizations.* Am. Econ. Rev., June, 1917. Pp. 12.

Importance of South American trade. Bull. Pan Am. Union, Dec., 1916.

Report of the National Foreign Trade Council on coöperation in foreign trade. Econ. Wld., Jan. 27, 1917.

Some foreign buyers criticise American sellers. Greater N. Y., Mar. 5, 1917.

World shipping conditions and the American merchant marine. Econ. Wld., Feb. 10, 1917.

Public Utilities

(Abstracts by Ralph E. Heilman)

BAUER, J. *Brooklyn Edison case decided.* Am. Econ. Rev., June, 1917. Pp. 2.

BLOOD, W. H., JR. *Some problems in the operation of public utilities.* Stone & Webster Journ., Mar., 1914.

Considers how far scientific management is applicable to the operation of public utilities.

BRYAN, F. A. *Finance and economics in the engineering profession.* Pub. Service, Mar., 1917.

Mere cost of reproduction is inadequate, and existing methods of computing depreciation are erroneous.

ELLIS, N. R. *The San Francisco water rate cases.* Utilities Mag., Jan., 1917.

Description of the valuation for rate purposes of the Spring Valley Water Company system. The magnitude of the questions involved, methods of conducting the case, the allowance made for real estate, structural values, water rights, rights of way, and going concern value.

GALLOWAY, J. D. *Is utility regulation on the right basis?* Engg. Rec., Nov. 4, 1916.

Urges that competition is needed, rather than protected monopoly.

GRAY, J. H. *How does industrial valuation differ from public utility valuation?* Utilities Mag., Jan., 1917.

Regulation limits profits. This removes public utilities from the realm of value, for value is measured by earning power. Therefore, to attempt to discover value, as a means of fixing rates, is to reason in a circle. The investment constitutes the proper basis for rates.

McFALL, R. J. *The problem of terminal rates.* Utilities Mag., Jan., 1917.

A condemnation of the present system, upon the ground that it artificially stimulates the growth of industrial centers, to the disadvantage of the agricultural sections.

METCALF, L. *Some observations upon public regulation of water works.* Journ. Am. Water Wks. Assoc., Mar., 1917.

Urges the necessity of greater liberty in commission determinations of value, and the establishment of returns which will offer inducement to and compensation for superior management.

WHALING, H. B. *Regulation of public utilities.* Quart. Journ. Univ. N. Dak., Jan., 1917.

A general summary of existing methods of control, with particular reference to existing conditions in North Dakota.

A. S. C. E. valuation report prepared. Elec. Ry. Journ., Jan. 13, 1917.

An abstract of the report of the special committee of the American Society of Civil Engineers on the valuation of public utilities.

Central station growth and rate reductions. Elec. Wld., Feb. 3, 1917.

Description of the plan of the Union Electric Street Railway and Power Company of St. Louis, which voluntarily offers certain rate reductions when a certain number of customers is obtained. The results accomplished by this plan in a year and a half.

Chicago traction estimates for 5,000,000 in 1950. Elec. Ry. Journ., Mar. 10, 1917.

Chicago Traction and Subway Commission states that it is safe to assume Chicago will have a population of 5,000,000 by 1950, and that such a population will produce gross revenue for a unified transportation system of \$104,000,000.

Fares in annexed districts. Elec. Ry. Journ., Jan. 13, 1917.

The United States Supreme Court holds that annexation of outlying suburban districts does not involve the extension of the city fare, of an electric railway, when such annexation is subsequent to the agreement between the city and the railway.

How a commission works. Elec. Wld., Feb. 3, 1917.

A description of the organization and operation of the departments of statistics, accounts, capitalization, and tariffs of the New York Second District Public Service Commission.

Municipal electric plant at Columbus, Ohio, a loser. Pub. Service, Mar., 1917.

Results of a survey of the operation of the municipal plant, conducted by the Bureau of Municipal Research of New York. The report claims there are many defects and shortcomings in the operation of this plant.

Railways and Transportation

(Abstracts by Julius H. Parmelee)

ALLIX, G. *Le réseau de l'état en 1915.* Journ. des Trans., Jan. 27, 1917. Pp. 3.

BIGGAR, E. B. *Government ownership v. private ownership of railways in Canada.* Journ. Pol. Econ., Feb., 1917. Pp. 35.

BUELL, D. C. *The man problem on the railroads.* Pro. Ry. Club of Pittsburgh, Jan. 26, 1917. Pp. 16.

BUTLER, P. *Some features of the federal valuation of railroads.* Western Ry. Club Pro., Dec. 18, 1916. Pp. 23.

COTTERILL, R. S. *Southern railroads and western trade, 1840-1850.* Miss. Valley Hist. Rev., Mar., 1917. Pp. 14.

CUNNINGHAM, W. J. *The separation of railroad operating expenses between freight and passenger services.* Quart. Journ. Econ., Feb., 1917. Pp. 32.

Analysis of growth of railway cost accounting in its various phases.

DELANO, F. A. *The railway problem of the United States.* Econ. Wld., Jan. 20, 1917. Pp. 5.

DOW, M. A. *Accident prevention.* Pro. N. Y. R. R. Club, Jan. 19, 1917. Pp. 15.

EMERY, J. A. *Government investigation of railway disputes.* Am. Industries, Feb., 1917. Pp. 3.

ERICKSON, H. *What are fair rates of return?* Elec. Ry. Journ., Mar. 31, 1917. Pp. 2.

Net earnings sufficient to attract necessary capital is the standard set up.

FROELICK, L. D. *Building China's railroads.* Asia, Mar., 1917. Pp. 8. Illustrated.

GRAY, J. H. *How does industrial valuation differ from public utility valuation?* Utilities Mag., Jan., 1917. Pp. 15.

HINES, W. D. *Who, then, shall run our railroads?* Nation's Business, Feb., 1917. Pp. 3.

A plea for adequate federal regulation.

JOHNSON, E. R. *Coördinating the operation of the railroads with the conduct of a great war.* Econ. Wld., Feb. 17, 1917. Pp. 3.

LANE, F. W. *Our railway and public utilities regulators.* Ry. Age Gaz., Mar. 30, 1917. Pp. 5.

Analysis of membership of railway commissions, state and federal.

MCCABE, D. A. *Arbitration awards under the Erdman and Newlands acts.* Am. Econ. Rev., Mar., 1917. Pp. 3.

McFALL, R. J. *The problem of terminal rates.* Utilities Mag., Jan., 1917. Pp. 7.

McMANAMY, F. *The locomotive inspection laws and rules; their purposes and achievements.* Pro. St. Louis Ry. Club, Feb. 9, 1917. Pp. 14.

By the chief locomotive inspector of the Interstate Commerce Commission.

MATHERS, G. S. A. *An Indian trans-Asiatic railroad.* Indian Journ. Econ., Sept., 1916. Pp. 29.

NAY, F. *Railway accounting.* Western Ry. Club Pro., Jan. 15, 1917. Pp. 19. With especial reference to federal accounting requirements.

NELSON, J. P. *Federal valuation of carriers under act of March 1, 1912.* Kentucky Law Journ., Mar., 1917. Pp. 16.

PESCHAUD, M. *Les chemins de fer aux Etats-Unis et les dernières menaces de grève.* Rev. Pol. et Parl., Mar. 10, 1917. Pp. 19.

First article in a series on the trainmen's strike threat of 1916.

PLYE, J. G. *The facts of the Northern securities case.* Wld. Wk., Apr., 1917. Pp. 7.

Additional pages from a life of James J. Hill.

SAKOLSKI, A. M. *The progress of federal valuation.* Am. Econ. Rev., Mar., 1917. Pp. 6.

SELEKMAN, B. M. *Nine years of the Canadian act.* Survey, Mar. 31, 1917. Pp. 9.

Analysis of Canadian industrial disputes investigation act of 1907.

SMITH, M. A. *A rule for testing tax valuations of railroads.* Am. Econ. Rev., Mar., 1917. Pp. 15.

SOMMERFELD, V. *Railway administration in war time.* British Rev., June, 1915. Pp. 14.

THELEN, M. *Federal incorporation of railroads.* Utilities Mag., Mar., 1917. Pp. 11.

THELEN, M. *Railroad grade crossing survey in California.* Ry. Age Gaz., Mar. 2, 1917. Pp. 3.

TYE, W. F. *A proposed consolidation of Canadian railroads.* Ry. Age Gaz., Feb. 23, 1917. Pp. 4.

Advocates consolidation of Grand Trunk, Grand Trunk Pacific, Transcontinental, and Canadian Northern systems.

WOOD, F. J. *The evolution of the railroad.* Stone & Webster Journ., Mar., 1917. Pp. 10.

An historical illustrated sketch.

WOODLOCK, T. F. *The problem for the Newlands committee.* Nation, Mar. 8, 1917. Pp. 3.

The Adamson law held to be constitutional. Ry. Age Gaz., Mar. 23, 1917. Pp. 4.

British railways in 1916. Statist, Mar. 3, 1917. Pp. 2.

The eight-hour day settlement. Ry. Conductor, Apr., 1917. Pp. 5.

Full details of the agreement of March 19, 1917, between the railways and the trainmen's brotherhoods.

Electric railway statistics. Elec. Ry. Journ., Mar. 31, 1917. Pp. 3.

Calendar year 1916; revenues increased 6.3 per cent, expenses 6.7 per cent, and net operating revenue 5.8 per cent.

Extra crew laws in the United States. Ry. Rev., Mar. 10, 17, 1917. Pp. 3, 3.

Digest of report on subject by New Jersey State Chamber of Commerce.

The future of English railways. Edinburgh Rev., Jan., 1917. Pp. 20.

Italy's new and better railroad organization. Ry. Age Gaz., Jan. 12, 1917. Pp. 4.

The railroad department. Am. Federationist, Feb., 1917. Pp. 4.

Historical sketch of the railroad employees' department of the American Federation of Labor.

Railways at the service of the government. Ry. Age Gaz., Apr. 13, 1917. Pp. 4.

Creation of a central executive committee of five railway executives, to operate the railways as a unit during the war.

Les chemins de fer dans la conduite et la poursuite de la guerre. La Nature, Sept. 2, 1916. Pp. 6.

Deals with French conditions. Illustrated.

Accounting

(Abstracts by Martin J. Shugrue)

ALLEN, L. H. *Cost accounting for the contractor.* Journ. Account., Mar., 1917. Pp. 8.

Outlines five essential features of a cost system for a contractor.

BARKER, H. *Side lights on depreciation problems of utilities.* Engg. News, Dec. 21, 28, 1916. Pp. 1, 3.

Review of methods for computing annual depreciation. First of a series.

BATCHELDER, F. J. *Procedure in valuation of Chicago elevated.* Elec. Ry. Journ., Mar. 3, 1917. Pp. 3.

Describes general plan followed by Chicago Traction and Subway Commission in laying basis for unification. Interesting details for various official accounts.

BATES, H. *Maintaining a continuous property inventory.* Elec. Ry. Journ., Jan. 20, 1917. Pp. 2.

Such a system makes value figures readily available for various uses. Substitutes facts for guesswork in figuring operating costs.

BREWER, A. F. *Principles of "straight line" depreciation.* Indus. Management, Apr., 1917. Pp. 2.

How to compute the depreciation of a property on the "straight line" system.

COWAN, J. D. *Reserves.* Journ. Account., Feb., 1917. Pp. 8.

Significance of the term "reserve" in accounting. Fundamental principles and problems involved in its use.

CRAM, R. C. *Analysis of track maintenance costs.* Elec. Ry. Journ., Mar. 17, 1917. Pp. 5.

Data and deductions from ten years' records of maintenance costs on nearly a hundred miles of surface track in Brooklyn, N. Y.

FITZPATRICK, E. A. *Training for public service, with special reference to training of accountants.* Pro. Nat. Assoc. Comptrollers & Account. Officers, 1916. Pp. 8.

FOREMAN, A. E. *Keeping cost data on municipal work carried out by day labor.* Canadian Engr., Dec. 14, 1916.

Benefits resulting from the system.

GREENWOOD, G. W. *Proving the payroll.* Indus. Management, Apr., 1917. Pp. 2.

A short-cut method for facilitating detecting of errors.

HARNED, F. M. *Functional and unit cost accounting for municipalities and its application by the City of New York.* Pro. Nat. Assoc. Comptrollers & Account. Officers, 1916. Pp. 5.

KERZIE, F. L. *An actual problem in serial bonds.* Journ. Account., Feb., 1917. Pp. 10.

Recently it became necessary in a large Pacific Coast city to de-

termine through protracted litigation the effective rate of interest as a whole on serial bonds issued by the city.

LAWTON, W. H. *Treatment of unissued stock and bonds.* Journ. Account., Apr., 1917. Pp. 12.

Maintains that unissued stock and bonds should not appear at all in capital stock and bonds payable accounts.

McKAY, C. W. *Appraisal of manufacturing plants.* Indus. Management, Feb., 1917. Pp. 7.

Two of the methods developed in the appraisement of public utilities have suggested a standard method of appraising industrial plants.

MANN, O. A. *Depreciation and depreciation reserves.* Journ. Account., Feb., 1917. Pp. 7.

Special reference to distinction between "reserve for accrued depreciation" and "reserve for contingent depreciation" in case of public utilities.

MORSE, J. G. *Accurate appraisals by short methods.* Nat. Fire Protection Assoc. Quart., Jan., 1917. Pp. 11.

Paper read before the American Society of Mechanical Engineers.

MUCKLOW, W. *Measuring financial efficiency of institutions.* Journ. Account., Feb., 1917. Pp. 18.

The operating expenses of institutions may be divided into two classes, constant expenses and variable expenses. From this point of view it is possible to make the accounts show an adequate measure of financial efficiency. Illustrated with charts.

PIEZ, C. *The relation between perpetual-inventory value and appraisal value.* A. S. M. E. Journ., Dec., 1916.

Their value in determining cost of product and other factors.

ROSS, T. E. *Annuity funds of religious and charitable organizations.* Journ. Account., Apr., 1917. Pp. 5.

Two methods of accounting for annuity funds explained.

SACK, I. *New York's new uniform system of accounts for third class cities.* Journ. Account., Apr., 1917. Pp. 19.

Explains some of the technical features of the uniform system of accounts recently formulated by the comptroller of the state of New York for third class cities.

SALIER, E. A. *Accounting and investments.* Journ. Account., Mar., 1917. Pp. 10.

Why security of investment is so virtually connected with satisfactory accounting control.

SAMPSON, E. T. *Municipal accounting.* Canadian Munic. Journ., Mar., 1917. Pp. 2.

Considers some important points in municipal finance and accounting. Continued in subsequent numbers.

SILVER, W. P. *Essentials of credit statements and analysis of credits and balances.* Journ. Am. Bankers Assoc., Apr., 1917. Pp. 4.

What bankers must look for in passing on applications for loans. Address before Cincinnati Chapter, American Institute of Banking.

SPIES, O. A. *Present worth of future coupon.* Journ. Account., Mar., 1917. Pp. 6.

Simplified formula for determining the sum of the present value of the future coupon payments.

WADDELL, T. C. *Uniform municipal accounting.* Nat. Tax Assoc. Bull., Dec., 1916. Pp. 3.

WISHART, J. G. *Making and filing valuation maps.* Engg. Rec., Feb. 17, 1917.

First article of a series. Useful suggestions based upon experience of past three years.

YUNGBLUTH, B. J. *Regulating materials and supplies.* Elec. Ry. Journ., Mar. 17, 1917. Pp. 3.

Plan is based on "stock-book" record and monthly count of stock on hand, with data as to orders and receipts.

Commission may not determine final valuation. Ry. Age Gaz., Feb. 2, 1916.

Interstate Commerce Commission does not now intend to prepare final valuation figures, but will only compile data which will aid in determining such valuations at some later date.

Report of the special committee to formulate principles and methods for the valuation of railroad property and other public utilities. Pro. Am. Soc. Civil Engrs., Dec., 1916.

Report of the Toledo commission of publicity and efficiency on status of accounting system. Toledo City Journ., Jan. 20, 1917. Pp. 4.

Standard depreciation rates for factory buildings and equipment. Eng. & Contracting, Jan. 24, 1917. Pp. 77.

Serious weakness in present system.

The two opposing railroad valuations. Unpopular Rev., Jan.-Mar., 1917. Pp. 14.

A general review of the practical significance of the federal valuation. Cost will probably exceed sixty million dollars.

A unique report on Missouri, Kansas and Texas. Ry. Age Gaz., Feb. 16, 1917.

A study of the value of each mortgage line as an independent road and as a part of the whole system.

Investments

(Abstracts by Arthur S. Dewing)

BABCOCK, A. L. *Trend of interest rates.* Moody's Mag., Jan., 1917.

Points out pros and cons but fails to generalize sufficiently to make discussion of value.

CHAPMAN, R. M. *Serial bonds vs. sinking fund bonds for municipal financing.* Econ. Wld., Mar. 17, 1917.

Points to advantages of serial bonds for well-known reasons.

CLAY, P. *American telephone collateral fires and how to read the market.* Moody's Mag., Jan., 1917.

Although these bonds, together with other telephone securities show substantial strength, the company's earnings show increasing ratio of expenses. To the economist the statistics given of the telephone industry are a remarkably clear illustration of the law of diminishing returns.

CLAY, P. *Montana power first fires.* Moody's Mag., Feb., 1917.

Superficial analysis of a so-called public utility and dependent on the mining industry.

HIGGINSON, H. L. *Need of fortifying this country's financial position by foreign investments.* Econ. Wld., Feb. 10, 1917.

Forceful letter emphasizing need of holding foreign investments as readily liquidable assets.

HOWELL, J. F. *Status of equipment stocks.* Moody's Mag., Mar., 1917.

Price changes in the stocks of companies manufacturing railway equipment.

LAWTON, W. H. *Treatment of unissued stock and bonds.* Journ. Account., Apr., 1917.

A keen comprehensive solution of a perplexing accounting problem of modern corporation finance.

RAFFALOVICH, A. *Les cours des principales valeurs aux bourses allemandes.* L'Econ. Franç., Jan. 27, 1917.

The statistics here outlined would indicate far less change in values than one would suppose—either inflation or depression. This applies to industrials and shipping shares as well as banks. The influences of currency inflation and government interference with prices are not gauged to the extent of making the conclusions of the writer altogether reliable.

SALIERS, E. A. *Accounting and investments.* Journ. Account., Mar., 1917.

Points out necessity of sound accounting methods as safeguards to investments.

SCHMIDT, L. W. *Buying foreign exchange at the bargain counter.* Moody's Mag., Jan., 1917.

Suggests speculation in German and Austrian exchange by buying the present internal war loans of these countries.

SPRAGUE, O. M. W. *Interest rates after the European war.* Econ. Wld., Feb. 10, 1917.

Does not hazard a definite opinion, pointing out contrary influence tending to reduce and to increase interest rates.

WOLFE, S. H. *A suggestion for a modified form of amortization with a brief memorandum of the applicability of that principle to the bonds of miscellaneous companies.* Pro. Casualty, Actuarial & Stat. Soc. of Am., Oct. 27, 1916.

Points out, as every student of finance knows, that present theory of amortization is of theoretic value, never accurate in practice. Suggests using an "annuity certain" the rate of which accords with an "average" of interest returns on normal investment through a period of years.

The chafing of small municipalities at the legal scrutiny of their bond issues.
Econ. Wld., Feb. 10, 1917.

Points to confusion arising in municipal bids if provision for scrutinizing legality is omitted.

Interpretation of U. S. Supreme Court decision upholding blue sky laws.
I. B. S. of A. Bull., Feb. 15, 1917.

Tries to offer comfort to investment bankers, without much success.

Investment of trust funds in participating mortgages. Banking Law Journ., Feb., 1917.

New York court of appeals upholds practice of investing funds belonging to different trust estates in single mortgage, taken in name of trustees.

Missouri, Kansas and Texas. Ry. Age Gaz., Jan. 12, 1917.

Summarizes the present financial status of the road.

Preliminary steps in the reorganization of the Missouri, Kansas and Texas.
Ry. Age Gaz., Feb. 16, 1917.

Reference to the Coverdale and Colpitts report on this road. This report, preliminary to reorganization emphasizes earning power as the fundamental basis of value. This attitude is epochal in engineers' reports.

Corporations and Trusts

(Abstracts by Arthur S. Dewing)

DAVIS, J. S. *Charters for American business corporations in the eighteenth century.* Quart. Pubs. Am. Stat. Assoc., Dec., 1916.

Very interesting condensed account of business charters between 1780 and 1800. Of the 335 examined, 130 were Massachusetts highway companies.

MOODY, W. F. *Central Leather Company.* Moody's Mag., Mar., 1917.

Brief statement of extraordinary earnings of this company.

TOSDAL, H. R. *The German steel syndicate.* Quart. Journ. Econ., Feb., 1917.

Exhaustive and careful review. Most interesting parts deal with effect of the kartel on the organizations of related factors,—competitors, dealers, buyers. Valuable to us is now the section dealing with the foreign trade policy.

A drastic reorganization. Ry. Age Gaz., Jan., 1917. P. 1.

A brief succinct statement of the Pere Marquette reorganization.

Labor and Labor Organizations

(Abstracts by George E. Barnett)

CLARK, L. D. *State regulation of employment on public work.* Mo. Rev. Bur. Labor Stat., Mar., 1917. Pp. 12.

COMMONS, J. R. *Eight-hour shifts by federal legislation.* Am. Labor Legis. Rev., Mar., 1917. Pp. 16.

The proposed legislation follows the lines of the federal child labor law.

DICKSON, W. B. *Eight-hour day and six-day week in the continuous industries.* Am. Labor Legis. Rev., Mar., 1917. Pp. 12.

Favors strongly the proposal, but emphasizes the practical difficulties.

FARNHAM, D. T. *Some experiences with profit sharing.* Indus. Management, March, 1917.

FITCH, J. A. *One day of rest in seven by state and federal legislation.* Am. Labor Legis. Rev., Mar., 1917. Pp. 9.

Discusses the attitude of the employers in the steel industry.

HAMILTON, A. *Industrial poisons used in the making of explosives.* Mo. Rev. U. S. Bureau Labor Stat., Feb., 1917. Pp. 22.

HICHENS, W. L. *Education and business.* Engr., Jan. 19, 1917.

Preparation needed by English youths for engineering.

HULL, H. and PARKINSON, T. I. *The federal child-labor law. The question of its constitutionality. Another view of its constitutionality.* Pol. Sci. Quart., Dec., 1916. Pp. 22.

HUMPHREY, A. W. *The British labor movement and the war.* Pol. Sci. Quart., Mar., 1917. Pp. 26.

Comprehensive historical account.

JONES, F. W. *Real wages in recent years.* Am. Econ. Rev., June, 1917. Pp. 19.

KELLY, R. W. *Hiring the worker.* Indus. Management, Feb., 1917. Pp. 6.

The reasons for the organization of employment departments and the duties of such departments.

LEPPINGTON, C. H. D'E. *The demand for labour as shown by rates of wages offered by employers.* Econ. Journ., Dec., 1916. Pp. 5.

A study based on advertisements for employees appearing in the London newspapers from June to September, 1916.

P. DE M. *Nouvelle législation espagnole sur les syndicats industriels.* Journ. des Econ., Jan., 1917. Pp. 6.

The new law makes provision for incorporating coöperative undertakings.

ROBBINS, E. C. *The trainmen's eight-hour day.* Pol. Sci. Quart., Dec., 1916. Pp. 17.

The history of the movement through the June conference.

STOCKTON, F. T. *The moulders' union and the allied metal trade.* Journ. Pol. Econ., Feb., 1917. Pp. 12.

Explains the attitude of the moulders toward joint strikes.

TUCKER, H. *Federal and state regulation of child labor.* S. Atlantic Quart., Jan., 1917. Pp. 5.

The present North Carolina child labor law in its relation to the federal act.

WILCOX, D. F. *Public regulations of wages, hours and conditions of labor of employes of public service corporations.* Nat. Munic. Rev., Jan., 1917. Pp. 10.

A report by the committee on franchises of the National Municipal League. Favors the use of franchise provisions to establish standard conditions of employment.

Compulsory arbitration in munitions industry in France. Mo. Rev. Bur. Labor. Stat., Mar., 1917. Pp. 5.

Text of official decree.

Cost of living and the minimum wage in New South Wales. Mo. Rev. U. S. Bureau Labor Stat., Feb., 1917. Pp. 4.

Some recent decisions as to how far the increase in living expenses due to war conditions should be allowed for in the minimum rate.

Effect of the minimum wage in retail stores in Massachusetts. Mo. Rev. U. S. Bureau Labor Stat., Feb., 1917. Pp. 6.

Discusses effect on wages, on reduction of working force, and on displacement of regulars by substitutes.

Industrial conciliation and antistrike legislation relating to public utilities in various countries. Mo. Rev. U. S. Bur. Lab. Stat., Jan., 1917. Pp. 9.

Brief summaries of the laws of various countries.

International relations of labor during the war. Mo. Rev. U. S. Bureau Labor Stat., Feb., 1917. Pp. 7.

The schism in the International Federation of Labor Unions and the proposed congress of labor at the end of the war.

New agreement in the dress and waist industry, New York City. Mo. Rev. Bur. Labor Stat., Mar., 1917. Pp. 3.

The present labor situation. Ann. Am. Acad., Jan., 1917. Pp. 274.

Articles dealing with various aspects of the labor problem, but chiefly centering around methods of settling conditions of employment in public utilities.

Training apprentices. Machinery, Feb., 1917.

The Pratt and Whitney system.

Work of state and municipal employment offices in the United States, and of provincial employment bureaus in Canada. Mo. Rev. U. S. Bureau Labor Stat., Feb., Mar., 1917. Pp. 8, 9.

Statistics of applications and positions filled.

Work of the board of trade employment exchanges in 1916. Board of Trade Labor Gaz. (London), Feb., 1917. Pp. 2.

The striking feature of the registrations was the great increase in the number of women and boys and the decrease in the number of men.

Money, Credit, and Banking

(Abstracts by Chester A. Phillips)

ALLEN, S. P. *Acceptances—a cure for credit complaints.* Nation's Business, Mar., 1917. Pp. 2.

The advantages of trade acceptances to buyers and sellers.

AVENOL, J. *Les banques algériennes et la Banque de l'Algérie*. Rev. Sci. Pol., Dec., 1916. Pp. 25.

The great development of Algerian trade as compared with that of Morocco is attributed to the superior banking facilities of Algeria. Suggests improvements in the banking system of Morocco.

BRADY, J. E. *Legal banking forms*. Banking Law Journ., Jan., 1917. Pp. 6.

The essentials of negotiability in promissory notes.

DAVIDSON, J. M. *German trade expansion: its methods and its tendencies*. Journ. Inst. Bankers, Feb., 1917. Pp. 8.

The organization, methods, and aims of German banking and its relation to the expansion of German commerce and industry.

DUNLOP, W. R. *Agricultural credit in the British West Indies*. Intern. Rev. Agri. Econ., Nov., 1916. Pp. 6.

Coöperative agricultural credit societies have been successfully established during the last twelve years in St. Vincent, Trinidad, St. Lucia, Jamaica, and British Guiana.

ECKARDT, H. M. P. *Canadian banking and commerce annual review*. Bankers Mag., Mar., 1917. Pp. 8.

FISHER, I. *Our yellow peril*. Moody's Mag., Mar., 1917. Pp. 2.

Parallelism between the amount of money in circulation and general prices in belligerent and neutral countries.

HARRIS, B. D. *Progress in the development of the use of trade acceptance*. Econ. Wld., Mar. 24, 1917. Pp. 4.

Progress already made in the trade acceptance campaign. The extent to which trade acceptances should be used; obstacles in the way of their wide adoption.

HOLDEN, E. H. *War finance in Great Britain, Germany and the United States*. Econ. Wld., Feb. 17, 1917. Pp. 3.

The various forms of government borrowings since the outbreak of war and the role of banks in war finance.

JAY, P. *The federal reserve collection system*. Trust Cos., Mar., 1917. Pp. 4.

A defense of the system, with suggestions to banks of new sources of profit.

NICHOLSON, J. S. *Inflation of the currency and the rise in prices*. Econ. Journ., Dec., 1916. Pp. 16.

The nature and causes of the present inflation in England.

PAYEN, E. *L'or en 1916: sa production, sa répartition dans le monde*. L'Econ. Franç., Mar. 3, 1917. Pp. 3.

PLENDER, W. *Winding up the enemy banks in London*. Journ. Inst. Bankers, Feb., 1917. Pp. 5.

ROTHFUSS, R. C. *Opinions of a banker in a great agricultural state on the federal farm loan act*. Econ. Wld., Mar. 10, 1917. Pp. 3.

An adverse criticism with special reference to the difference between our agricultural credit conditions and those of Europe, to the difficulties and dangers inherent in appraisal practices under the oper-

ation of the act, and to the question of inflation of farm land prices as touching the interests and prospects of tenant farmers.

SPALDING, W. F. *London joint stock banks vis-à-vis foreign branch banks.* Bankers' Mag. (London), Jan., 1917. Pp. 6.

Defends the English notion of limiting the field for banking operations to non-speculative enterprises. No obstacles should be placed in the way of the reopening of London branches after the war by banks in any of the now hostile countries.

THOMPSON, C. W. *Providing credit during production.* Intern. Rev. Agri. Econ., Nov., 1916. Pp. 3.

Charges on short-time bank loans to American farmers indicate need for improvement in facilities, including contact between the farmer and outside or distant sources of capital supply.

THRALLS, J. *Report of the first meeting of the committee of twenty-five.* Journ. Am. Bankers Assoc., Jan., 1917. Pp. 2.

A protest against the provisions of the Federal Reserve act relating to the collection of checks.

THRALLS, J. *Trade acceptances considered by credit men.* Journ. Am. Bankers Assoc., Apr., 1917. Pp. 2.

National Association of Credit Men strongly favorable to use of trade acceptance.

VON ENGELKEN, F. J. H. *Seasonal demands for coinage peak-load pressure on the mint.* Journ. Am. Bankers Assoc., Mar., 1917. Pp. 3.

Bankers are urged to anticipate requirements by study of coinage charts.

WAGEL, S. R. *The position of country banks on the question of the use of acceptances.* Journ. Am. Bankers Assoc., Apr., 1917. Pp. 3.

WILLIS, H. P. *What the federal reserve system has done.* Am. Econ. Rev., June, 1917. Pp. 20.

WOLFF, H. W. *Agricultural banks.* Indian Journ. Econ., Sept., 1916. Pp. 6.

The reversal of the policy of the Agricultural Bank of Egypt of lending to small cultivators on the security of their land. Let the people of India, interested in the Egyptian institution as a model, rest content with their well tested coöperative banks.

Brief filed in behalf of trust companies in Supreme Court of United States (complete text). Trust Cos., Mar., 1917. Pp. 11.

Decision of United States Circuit Court of Appeals sustains the constitutionality of Section 3 of the Emergency Revenue law of 1914, relating to the taxation of trust companies; only, however, in so far as the trust company concerned conducts a banking business.

Cost of circulating media and the misnomer of "par collections." Journ. Am. Bankers Assoc., Feb., 1917. Pp. 3.

The scheme of par collection of checks through federal reserve banks merely shifts the cost of collection from the drawer or drawee to the banks on which the checks are drawn.

Establishment of the first municipal bank. Scottish Bankers Mag., Jan., 1917.

The initial success of the Birmingham Corporation Savings Bank leads to the belief that the movement, just inaugurated, will spread to other large English cities.

How a new trust company gained 10,000 savings depositors during its first year. Bankers Mag., Mar., 1917. Pp. 3.

The principal factors were printer's ink and a slogan of "four per cent from day of deposit."

Les opérations de la Banque de France pendant l'année 1916. L'Econ. Franç., Feb. 17, 1917. Pp. 3.

Report of the governor of the Bank of France to the stockholders, January 25, 1917. The work of the bank in connection with the requirements of an intensified economic activity at home, as a fiscal arm of the state, and in its relations to foreign exchange and foreign money markets, particularly New York.

The progress of banking in Great Britain and Ireland during 1916. Bankers' Mag. (London), Jan., 1917. Pp. 29.

A statistical study with recommendation of more frequent and detailed reports of condition.

Sir Edward Holden on war finance. Journ. Inst. Bankers, Mar., 1917. Pp. 5.

Some facts as to the development and organization of Catholic rural banks in the district of Lodi. Intern. Rev. Agri. Econ., Dec., 1916. Pp. 8.

To make \$1 do the work of \$6. Annalist, Mar. 19, 1917. Pp. 2.

Proposes that the Federal Reserve Bank of New York settle by bookkeeping entries the clearing house balances of all its member banks located within the metropolitan clearing area.

Public Finance

(Abstracts by Charles P. Huse)

BARKER, D. A. *The Indian customs.* Indian Journ. Econ., Sept., 1916. Pp. 10.

Traces the development of the Indian customs from 1859 to the present.

CASTELLI, G. *Il centesimo di guerra e la sua pratica applicazione.* Riv. Intern., Nov., 1916. Pp. 10.

The problem of administering one form of war taxation in Italy.

DOCKERY, A. M. *Uncle Sam's billion-dollar business.* Annalist, Jan. 15, 1917. Pp. 2.

A description with statistical tables of the post-office business by the third assistant postmaster general.

FALCK, E. *L'impôt complémentaire sur le revenu. Les dernières modifications législatives.* Journ. des Econ., Feb., 1917. Pp. 8.

A discussion of recent changes in the French income tax.

FRASCHETTI, A. *La politica commerciale italiana e i suoi effetti sull'economia nazionale.* Giorn. d. Econ., Oct., 1916. Pp. 18.

This concluding essay of a series outlines needed tariff reforms for Italy.

HAIK, R. M. *The unearned increment in Gary*. Pol. Sci. Quart., Jan., 1917
Pp. 15.

Presents the results of an original investigation of the growth of the unearned increment in Gary, Indiana.

HART, F. R. *Financial and credit status of allies*. Trust Cos., Feb., 1917.

Examines, from a banker's standpoint, the credit of the allies and finds it good.

HENRIQUES, C. O. *Danmarks finansielle Forhold til Udlandet*. Nat. ök. Tids., Nov.-Dec., 1916. Pp. 27.

Discusses Denmark's financial relation to other countries. Since the war Denmark has succeeded in freeing herself from all foreign financial obligations.

HOLDEN, E. H. *War finance in Great Britain, Germany and the United States*. Econ. Wld., Mar. 3, 1917. Pp. 4.

Describes methods of raising German loans, the federal reserve system and American finance as affected by the war.

HUBERT-VALLEROUX. *Quelques idées étrangères en matière d'impôts*. Réf. Soc., Feb., 1917. Pp. 11.

A discussion of the incidence of the various French taxes upon large families.

JÈZE, G. *Les finances de guerre de l'Angleterre*. Rev. Sci. et Légis., Oct.-Nov.-Dec., 1916. Pp. 37.

Continues study of British war finance.

JÈZE, G. *Finances de guerre de l'Italie*. Rev. Sci. et Légis., Oct.-Nov.-Dec., 1916. Pp. 89.

Continues study of Italian war finances.

MASON, H. A. *The administration of public debts (with discussion)*. Pro. Nat. Assoc. Comptrollers & Account. Officers, 1915.

NORMAND, J. *Les recettes de l'octroi de Paris en 1916*. L'Econ. Franç., Feb. 3, 1917. Pp. 3.

Describes recent changes in the octroi collections at Paris.

RAFFALOVICH, A. *Russian financial policy*. Econ. Journ., Dec., 1916. Pp. 5.

A brief outline of Russian financial policy since 1862.

RAWLES, W. A. *Pittsburgh committee on taxation study*. Am. Econ. Rev., June, 1917. Pp. 3.

REUSSWIG, F. G. *State supervision of municipal finances (with discussion)*. Pro. Nat. Assoc. Comptrollers & Account. Officers, 1915.

A description by the deputy comptroller of New York State, of the experience of New York in the supervision of municipal finance.

SCHIELLE, G. *Sur les monopoles et industries d'Etat*. Journ. des Econ., Feb., 1917. Pp. 7.

Reasons for not resorting to state monopolies to provide post bel-lum revenues.

SCOTT, J. H. *Practical workings of a revenue system separating state from local taxation.* Pro. Nat. Assoc. Comptrollers & Account. Officers, 1915.

TURNER, J. R. *Some considerations on land taxation.* Quart. Journ. Econ., Feb., 1917. Pp. 7.

A criticism of certain arguments used in single tax discussions.

WEISS, W. F. *Dividends and the new income tax law.* Journ. Account., Nov., 1916. Pp. 10.

Points out that stock dividends are treated as income by the Treasury Department, though held to be capital by the courts.

The elements of state budget making. Munic. Research, Dec., 1916. Pp. 63.

Gives rules for budget making.

The great crisis. Bankers' Mag. (London), Feb., 1917. Pp. 13.

Gives the terms of the new British war loan.

Les impôts nouveaux. Monde Econ., Jan. 6, 1917. Pp. 7.

Gives text of recent changes in French revenue acts.

L'impôt sur le revenu: nécessité d'une méthode fiscale qui ménage l'avenir. L'Econ. Franc., Dec. 30, 1916. Pp. 3.

A discussion of the plans proposed for increasing the French revenues.

A select bibliography on municipal budget-making. Nat. Munic. Rev., Jan., 1917. Pp. 5.

Prepared by the bureau of municipal research, Harvard University.

Some results and limitations of central financial control. Munic. Research, Jan., 1917. Pp. 63.

A statistical study of the finances of New York City during the last decade, with special reference to progress in financial control.

Population and Migration

(Abstracts by W. B. Bailey)

GOMPERS, S. *Immigration legislation effected.* Am. Federationist, Mar., 1917.

A brief review of the immigration legislation of the past few decades in this country.

GRAY, A. C. E. *Child mortality.* Charity Organ. Rev., Jan., 1917. Pp. 10.

A proposal of certain measures intended to reduce child mortality.

PÉREZ, L. M. *La inmigración Jamaicana.* Ref. Soc. (Cuba), Oct., 1916.

Social, economic, and hygienic aspects of the increasing negro migration from Jamaica to Cuba.

SHAH, P. G. *The population problem in India.* Wealth of India, Nov., 1916. Pp. 5.

A somewhat critical review of a recent essay on the same subject, by P. K. Wattal, Assistant Accountant General of India.

TROTTER, S. *The fundamental nature of population.* Sci. Mo., Mar., 1917. Pp. 12.

An attempt to define the relation between the individual and society.

WORMS, R. *La disminución de la natalidad en Francia*. Ref. Soc. (Cuba), Nov., 1916. Pp. 7.

Death rates and average age at death among members of certain trade-union benefit funds. Mo. Rev. U. S. Bur. Lab. Stat., Jan., 1917. Pp. 8.

Results obtained from a study of workmen's insurance and benefit funds in the United States made by the Bureau of Labor.

The disconcerting rise of the death rate in Japan. Econ. Wld., Jan. 13, 1917.

Whereas in Great Britain, France, and Germany the death rate in the past forty years has decreased considerably, the death rate in Japan has increased from 17.8 in 1871-1875 to 19.9 in 1912.

Maternal mortality in connection with childbirth. Mo. Rev. U. S. Bur. Lab. Stat., Jan., 1917. Pp. 10.

A review of a report published by the local Government Board of Great Britain.

The new measures favourable to colonization. Intern. Rev. Agri. Econ., Nov., 1916. Pp. 5.

A brief study of the attempts made to improve conditions and increase production in the French colonies.

The results of interior colonization in Finland. Intern. Rev. Agri. Econ., Nov., 1916. Pp. 10.

A review of the results accomplished in the effort to increase the number of small settlers in Finland.

Housing

(Abstracts by James Ford)

BENNETT, A. *How to restore stability to cottage building*. Garden Cities & Town Planning, Jan., 1917. Pp. 5.

BRAMNÄS, C. V. *Boligkommissionen af 1916*. Nat. ök. Tids., Nov.-Dec., 1916. Pp. 3.

A commission has investigated the housing problem in Denmark and recommends further regulation of renting and use of existing buildings and government aid in new construction.

FORD, J. *Housing conditions as factors in the production of disease*. Am. Journ. Pub. Health, Jan., 1917. Pp. 4.

Evidence of bacteriology and pathology as to the association with housing conditions.

GILBERT, C. D. *A group of concrete houses for steel mill employees*. Concrete, Jan., 1917. Pp. 6.

Houses of American Steel and Wire Company at Donora, Pennsylvania.

IHLDER, J. *The houses of Providence*. Survey, Nov., 1916. Pp. 2.

IHLDER, J. *Houses for wage-earners*. Survey, Feb. 24, 1917. Pp. 3.

Report of the housing competition of the National Americanization Committee. Illustrated.

MAY, C. C. *Indian Hill, an industrial village at Worcester, Mass.* Arch. Record, Jan., 1917. Pp. 14.

Development of 116 acre tract by the Norton Company.

SCHNEIDER, F. J. *Some shortcomings of socio-sanitary investigations.* Am. Journ. Pub. Health, Jan., 1917. Pp. 11.

Important criticism of statistical attempts (especially of Liverpool) to show effect of house on health.

STONE, S. H. *House infection and the spread of tuberculosis.* Journ. Outdoor Life, Feb., 1917. Pp. 5.

House infection is shown to be relatively infrequent.

The Düsseldorf building ordinance. Landscape Arch., Jan., 1917. Pp. 12.

From forthcoming book on *City Planning Law* by F. B. Williams.

The housing question and the finance act, 1909-1910. Finan. Rev. Rev., Dec., 1916. Pp. 8.

Urges repeal of part I of Finance act because a hindrance to development of property.

Set-back lines as an aid to better and cheaper street layouts. Am. City, Feb., 1917. Pp. 5.

Set-backs for residential districts as suggested by Robert H. Whitten. Illustrated.

Special issue devoted to workingmen's and low-cost housing including the plans obtained in the immigrant housing competition of the National Americanization Course. Arch. Rev., Jan., 1917. Pp. 48.

Papers by E. T. Hartmann, John Nolen, Mrs. J. von Wagner, M. Paris, R. L. Davidson, Charles Kayser, and others.

Insurance and Pensions

(Abstracts by Henry J. Harris)

BELL, E. W. *Points of danger in insurance against loss of profits through fire (use and occupancy insurance).* Econ. Wld., Mar. 10, 1917. Pp. 4.

Dangers can be reduced by requiring that only firms in existence for five years be accepted, only firms of highest moral standards be accepted, that insurance be based on profits of last three years, that only retailers in large cities be accepted, and that policies be reviewed on renewal.

BEYER, D. S. *Experience rating vs. schedule rating in workmen's compensation insurance.* Econ. Wld., Feb. 10, 1917. Pp. 4.

Schedule contributes to equity between employers and affords inducement for preventing accidents. Experience rating is inequitable to employers, but as it is valuable as an incentive to accident prevention, some form of "accident frequency rating" is desirable.

BLANCHARD, R. H. *Insurance of the catastrophe hazard.* Ann. Am. Acad., Mar., 1917. Pp. 7.

Methods of insurance with instances from fire and workmen's compensation insurance.

BOIES, O. H. *Life insurance companies' investments of the decade 1904-1914 analyzed, classified, compared and shown in their relation to the general economic progress of the United States during the same period.* Econ. Wld., Jan. 27, 1917. Pp. 3.

Real estate mortgage loans have increased from 27.37 per cent to 34.46 per cent of assets; railroad bonds decreased from 30.16 to 26 per cent; policy loans increased from 7.54 to 14.94 per cent; state, county, and municipal bonds increased from 6.57 to 11.06 per cent.

BOSTON CHAMBER OF COMMERCE. *Report of the special committee on social insurance concerning non-contributory old age pensions and health insurance.* Current Affairs, Supplement, Feb. 6, 1917. Pp. 15.

Opposes the bills before the Massachusetts legislature providing non-contributory old-age pensions. Recommends appointment of a small commission to prepare plans for a "progressive method of sickness prevention" with the purpose of gradually introducing comprehensive system of health insurance, employer and insured, each paying half the cost.

BUCK, G. B. *Municipal pensions and pension funds.* Pro. Nat. Assoc. Comptrollers and Account. Officers, 1916. Pp. 6.

Dangers of establishing funds on an inadequate basis, as shown by New York City funds.

CLARK, L. D. *Permanent partial disabilities under the workmen's compensation acts.* Econ. Wld., Mar. 31, 1917. Pp. 4.

In the equitable compensating of the maimed worker, the statutory schedule has many advantages over the percentage system.

CROWELL, J. F. *Social insurance.* Mo. Bull. N. Y. Chamber of Commerce, Supplement, Feb., 1917. Pp. 92.

American experience in compulsory health insurance is limited, and European experience is of doubtful value for America. Alternatives for state health insurance are: state supervision of voluntary societies; group insurance; possibility of including occupational diseases in accident compensation insurance; coördination of various governmental health offices; investigation of condition of employees in lower wage groups with the purpose of improving their status.

DAWSON, M. M. *Mutualization of life insurance companies.* Ann. Am. Acad., Mar., 1917. Pp. 15.

History of the movement.

DAWSON, M. M. *Principles of health insurance.* Am. Labor Legis. Rev., Mar., 1917. Pp. 8.

Review of the history of health insurance, with explanation of actuarial features.

DAWSON, M. M. *Temporary and permanent disability reserves.* Pro. Casualty, Actuarial & Stat. Soc. of America, Oct. 27, 1916. Pp. 5.

Gives table with the factors used by the state insurance fund of Holland.

DOWNNEY, E. H. *The public supervision of workmen's compensation insurance.* Ann. Am. Acad., Mar., 1917. Pp. 20.

Indicates necessary amendments in laws regulating reserves and rate making.

DOWNNEY, E. H. *Some principles of compensation merit rating.* Pro. Casualty, Actuarial & Stat. Soc. of America, Oct. 27, 1916. Pp. 27.

Proposes to construct several industry-group schedules, each limited to tangible hazards, then to derive the premium value of these hazards from accident statistics and to apply these values to the grading of individual risks by means of score points.

DUBLIN, L. I. *Social bearings of workingmen's insurance.* Econ. Wld., Feb. 17, 1917. Pp. 4.

Using Germany as an example, the accident rate has been bettered, the sickness rate has nominally increased, but with it life expectancy has improved, tuberculosis rate has decreased. Principal objection to current proposals for health insurance is the failure to include existing agencies.

DWIGHT, E. *The rise and development of employment liability insurance.* Econ. Wld., Mar. 3, 1917. Pp. 3.

Review of change from liability to compensation system.

ELDRIDGE, G. D. *The purposes of valuation with relation to fraternal benefit societies.* Ins. News, Nov., 1916. Pp. 3.

The valuation of a fraternal organization is purely and simply a determination, based on the society's actual mortuary collections (rigidly excluding expense provision), of the sufficiency of the rates to meet future obligations, contracted to be paid.

FISHER, A. *Note on an application of Bayes' rule in the classification of hazards in experience rating.* Pro. Casualty, Actuarial & Stat. Soc. of America, Oct. 27, 1916. Pp. 6.

Use of the formula in testing representative data.

FISHER, I. *The need for health insurance.* Am. Labor Legis. Rev., Mar., 1917. Pp. 15.

Will aid greatly in reducing illness, lengthen life, reduce poverty, improve working power, raise wage level, and diminish industrial discontent.

FRANKEL, L. K. *Conservation of life by life insurance companies.* Ann. Am. Acad., Mar., 1917. Pp. 15.

One company shows a clearly defined reduction of the death rate from certain groups of diseases as well as a marked reduction in the general mortality during the period of activity on conservation lines. Coöperation between companies the next step.

GREENE, W. *Trade union sick funds and compulsory health insurance.* Am. Labor Legis. Rev., Mar., 1917. Pp. 5.

The cost of adequate health insurance is too heavy to be borne by the insured alone.

HAMILTON, G. *Trade unions and social insurance.* Am. Federationist, Feb., 1917. Pp. 4.

Compulsory health insurance is opposed by organized labor because it is of the nature of "aid," it makes distinctions of class and is unnecessary because by organized effort wages can be improved sufficiently to enable the unions to provide insurance.

HOFFMAN, F. L. *Some fallacies of the arguments for the introduction of social insurance into the United States.* Econ. Wld., Feb. 3, 1917. Pp. 2.

Compulsory health insurance in the United States is unnecessary because of the high level of wages, *e.g.*, an increase of ten cents per day in wages would cover the annual loss to wage-earners from sickness; medical attendance is readily obtainable, the sanitary progress in Europe is due to causes other than insurance, the proposed distribution of the cost is inequitable, many voluntary agencies are providing a large measure of relief, and the proposal is a thinly disguised form of charity.

HUNTER, A. *Insurance on sub-standard lives.* Ann. Am. Acad., Mar., 1917. Pp. 16.

A study of the types, methods of estimating degree of risk and methods of charging for the extra risk.

HUYCK, E. N. *Establishment funds and universal health insurance.* Am. Labor Legis. Rev., Mar., 1917. Pp. 5.

Account of a successful fund.

JONES, J. P. *Workmen's compensation.* Univ. Arizona Bull., Jan. 16, 1917. Pp. 19.

Review of subject with special reference to the mining industry.

KEESON, W. D. *A foreign-controlled necessity.* Annalist, Feb. 19, 1917. P. 1.

American ship and cargo owners usually place the greater part of their insurance abroad, principally in London. Since the war, American companies have increased their business but even now they reinsure about one third of their risks in foreign companies.

LAMBERT, A. *Medical organization under health insurance.* Am. Labor Legis. Rev., Mar., 1917. Pp. 14.

Outlines plan of administration of medical benefit in bill proposed by Association for Labor Legislation.

LASKER, B. *The British system of national unemployment insurance in its relation to other methods of dealing with unemployment.* Econ. Wld., Jan. 13-20, 1916.

Summary of study published by the United States Bureau of Labor Statistics.

LATHROP, J. C. *Public protection of maternity.* Am. Labor Legis. Rev., Mar., 1917. Pp. 9.

From causes connected with childbirth, there were 15,000 deaths of women in 1913; half of these were entirely preventable, the other half to a great extent. Medical care, sick wage, etc., by a maternity insurance system would reduce this death rate. Such a system is ex-

pensive, perhaps too much of a burden for employees and employers to carry. Suggests a special committee to secure data and devise plans.

LENTZ, J. J. *Fraternal societies under universal health insurance*. Am. Labor Legis. Rev., Mar., 1917. Pp. 5.

The fraternalists should coöperate in the movement.

LINTON, M. A. *Life annuities*. Ann. Am. Acad., Mar., 1917. Pp. 18.

Advantages of annuities, kinds of annuities, methods of computation, etc.

LUNGER, J. B. *The problem of cash surrender values and cash loans*. Ann. Am. Acad., Mar., 1917. Pp. 8.

Cash values and loan values need to be brought down to the level that will not be an inducement to the forfeiture of the insurance.

MALLALIEU, W. E. *The enormous part played by carelessness in the fire loss of the United States*. Econ. Wld., Feb. 24, 1917. Pp. 3.

The strictly preventable causes are responsible for 21.4 and the partly preventable for 37.9 per cent of the fire loss.

MORTIMER, J. D. *Pensions and minimum wage laws*. Elec. Ry. Journ., Feb. 17, 1917. Pp. 5.

Present pension practice of some large employers, including terms, conditions, costs, contributions of employers, etc.

MOWBRAY, A. H. *Scheduled experience rating*. Pro. Casualty, Actuarial & Stat. Soc. of America, Oct. 27, 1916. Pp. 12.

Proposes the grouping of accidents experienced, by causes, and computing total pure premium from sectional computations.

MUDGETT, B. D. *The exemption of life insurance funds from taxation*. Ann. Am. Acad., Mar., 1917. Pp. 18.

Present federal and state taxation is unscientific; English practice is sounder.

MUDGETT, B. D. *Five years of progress in disability protection*. Ann. Am. Acad., Mar., 1917. Pp. 9.

In five years 26 companies have revised their clauses, practically all for the better; 47 new clauses have entered the field. Of the latter, 12 are from companies organized since January 1, 1912, and 8 from those organized prior to 1870.

NICHOLS, W. S. *Fraternal insurance in the United States: its origin, development, character and existing status*. Ann. Am. Acad., Mar., 1917. Pp. 14.

The societies are gradually being brought to the stage where an adequate level premium and reserve are maintained.

OSBURN, C. *National insurance and other matters*. Charity Organ. Rev., Jan., 1917. Pp. 6.

No report of the working of the British health insurance system has been published since that for 1913-1914. The parliamentary committee on accounts shows an increasing number of "grants."

RHODES, J. E. *Compensation administration and adjustments*. Ann. Am. Acad., Mar., 1917. Pp. 24.

RICE, E. E. *A coöperative insurance and pension system.* Elec. Ry. Journ., Feb. 17, 1917. Pp. 5.

Outline of plan for various forms of protection—sickness, accident, old age, death—to be used for employees of corporations.

RIEGEL, R. *Problems of fire insurance rate-making.* Ann. Am. Acad., Mar., 1917. Pp. 21.

Advantages of schedule rating as the solution of the problem.

RIEGEL, R. *Rate-making organizations in fire insurance.* Ann. Am. Acad., Mar., 1917. Pp. 27.

Legislation to enforce competition has been ineffective and must be replaced by coöperation.

ROCCA, G. *Particular forms of agricultural insurance in Switzerland.* Intern. Rev. Agri. Econ., Nov., 1916. Pp. 17.

Description of system and operations of Swiss funds for insurance against hail, floods, and accidents to agricultural laborers.

RUBINOW, I. M. *Health insurance through local mutual funds.* Am. Labor Legis. Rev., Mar., 1917. Pp. 9.

The local mutual carrier is economical, cares for the poor risks, is democratic, has advantages in providing medical aid, and directs attention to sanitation and public health.

RUGGLES, C. O. *The proposal of the Carnegie Foundation for Teachers' Insurance.* Journ. Pol. Econ., Mar., 1917. Pp. 8.

Provision should be made for making the disability clause effective from the beginning of the teacher's service, and the term insurance should be of a type which provides an increased amount while family responsibilities are heaviest.

RYAN, H. E. *Methods of insuring workmen's compensation.* Ann. Am. Acad., Mar., 1917.

Stock companies, mutual associations, state funds, self-insurance, and reciprocal or inter-insurance are in operation. The mutual association and the state fund probably the method of the future.

SCATTERGOOD, C. E. *The calculation of workmen's compensation premium rates.* Ann. Am. Acad., Mar., 1917. Pp. 8.

Discussion of the factors to be included.

SENIOR, L. S. *The practice of schedule and experience rating for workmen's compensation risks.* Ann. Am. Acad., Mar., 1917. Pp. 10.

Schedule rating has many clearly defined advantages; no plan of experience rating yet devised has produced rational results in its application.

TALBOT, W. L. *Income policies.* Ann. Am. Acad., Mar., 1917. Pp. 19.

Advantages of income policies.

TROUSDALE, R. B. *Group insurance.* Ann. Am. Acad., Mar., 1917. Pp. 17.

Methods, cost and advantages of the plan.

WENTWORTH, F. H. *American fire waste and its prevention.* Ann. Am. Acad., Mar., 1917. Pp. 7.

Suggests correctives which will reduce fire waste.

WOOD, A. B. *Experience of Canadian life insurance companies with war losses.* Econ. Wld., Mar. 10, 1917. Pp. 2.

The net loss under war claims of nine Canadian companies was 13.3 per cent of the expected claims. One large British company shows a similar figure of 13.9 per cent.

WOODWARD, A. P. *The disability insurance policy.* Ann. Am. Acad., Mar., 1917. Pp. 11.

Benefits provided by the policy, with suggestions for improvement. State supervision should be flexible enough to allow for changes in economic and social development.

The federal law for workmen's compensation, the federal child labor law, the movement for a federal eight-hour law, the social insurance conference. Catholic Charities Rev., Jan., 1917.

The compensation law for federal employees is the most liberal yet enacted in this country.

Health insurance officially endorsed. Am. Labor Legis. Rev., Mar., 1917.

Extracts from commission reports and governors' messages to legislatures of 1917.

Pauperism and Charities

(Abstracts by F. D. Watson)

ABBOTT, E. *Charles Booth, 1840-1916.* Journ. Pol. Econ., Feb., 1917.

An appreciative sketch of the life of the author of that monumental work, *Life and Labour of the People in London.*

BRIGGER, G. *A study of twenty-five repeaters at the associated charities, Portland, Oregon.* Journ. Delinquency, Sept., 1916.

The data of this study are presented, not with a view to their serving as conclusive proof of anything, since the number of cases studied is too small. They show that with larger numbers, it might be proven statistically that a considerable proportion of this class of people are probably mentally defective, and hence cannot be held responsible for normal social conduct or for self-support.

CHRYSTOM, S. J. *Sermon on alms; delivered at Antioch after passing through the market-place in the winter-time and seeing the paupers and beggars lying there neglected.* Studies in Social Work, No. 10, The New York School of Philanthropy, Feb., 1917. Pp. 24.

A translation by Margaret M. Sherwood from the parallel Greek and Latin text of the Abbé Migne, in volume 51 (p. 260-271) of his *Patrologiae Cursus Completus*, Series Græca.

SIMKHOVITCH, M. K. *The city's care of the needy.* Nat. Munic. Rev., Mar., 1917.

A program for a municipal department of charities or as the author would prefer to call it, "a department for the prevention and care of destitution." Its first duty would be to know the extent of poverty in the city; its second, to establish a bureau of prevention which would include a study and furtherance of social insurance, the removal of

unemployment, and the publishing of an industrial report including a public statement of wages paid in the industries of the community; its third, the reduction as far as possible of its institutional care of dependent children and the dependent aged.

VIVÈS, J.-L. *Concerning the relief of the poor or concerning human need; a letter addressed to the Senate of Bruges, Jan. 6, 1526.* Studies in Social Work, No. 11, The New York School of Philanthropy, Feb., 1917. Pp. 47.

A translation by Margaret M. Sherwood from the original Latin, as found in volume IV, pages 420-494 of the complete works of Vivès, edited by Gregory Majan, and printed at Valencia in the year 1783.

Report on the distribution of alms in Stepney. Charity Organ. Rev., Mar., 1917.

A report of a committee appointed October, 1915, to inquire into the method of distribution of alms in the rural deanery of Stepney, based on replies to questions sent to clergy of the deanery. Care of the sick and needy should be part of the work of a parish church and its officers, lay and ordained. It recommends standardizing the work so as to make it of professional grade.

Statistics

(Abstracts by A. A. Young)

CASE, M. E. *Highway accidents in New York City during 1915.* Quart. Pubs. Am. Stat. Assoc., Sept., 1916. Pp. 6.

CATTELL, J. McK. *Families of American men of science.* Sci. Mo., Mar., 1917. Pp. 15.

Marriages and number of children. Interesting results, not very well organized.

CHAPIN, F. C. *The experimental method and sociology.* Sci. Mo., Mar., 1917. Pp. 10.

"The statistical method bears to scientific method in sociology much the same relation that the experimental method bears to precise methods in physical science."

DRAGE, G. *The reorganization of official statistics and a central statistical office.* Journ. Royal Stat. Soc., Jan., 1917. Pp. 35.

On statistical reorganization after the war. Need of coördination of official statistics, of a central statistical office, and of an adequate statistical year book. With discussion by A. L. Bowley, J. C. Stamp, H. V. Reade, S. G. Warner, J. Baker, and B. Mallet.

DUBLIN, L. I. *The increasing mortality after age 45.* Quart. Pubs. Am. Stat. Assoc., Mar., 1917. Pp. 13.

A noteworthy contribution on an important problem. "The changing constitution of our race stock is responsible for the slight increase in mortality that has occurred."

DUBLIN, L. I. *The present status of birth registration in American cities and its relation to the infantile mortality rate.* Quart. Pubs. Am. Stat. Assoc., Mar., 1917. Pp. 15.

EDGEWORTH, F. Y. *On the mathematical representation of statistical data.* III. Journ. Royal Stat. Soc., Jan., 1917. Pp. 30.

This instalment deals with the relation between Edgeworth's generalized law of error and his method of translation. The conclusion is that in the neighborhood of the normal type the two methods are equally advantageous, but that at a farther remove from the normal type the method of translation is preferable.

FISKE, C. N. *Forty-five years of U. S. naval morbidity statistics of degenerative disorders.* Quart. Pubs. Am. Stat. Assoc., Dec., 1916. Pp. 7.

A short but weighty paper by a U. S. Navy Surgeon. The records show that the degenerative diseases of mature age (the scleroses, cancer, etc.) in the U. S. Navy and Marine Corps have decreased.

FORSYTH, C. H. *Interpolation of ordinates and areas among areas.* Quart. Pubs. Am. Stat. Assoc., Dec., 1916. Pp. 8.

An account of some simple methods of interpolation by means of finite differences.

GAHN, H. *Förmögenhets—och inkomst förhållandena i rikets olika delar enligt 1913 aars taxering.* Ek. Tids., No. 2, 1916. Pp. 31.

A careful analysis of the relation of property to income in the different parts of Sweden according to the statistics of 1913.

GEHLKE, C. E. *On the correlation between the vote for suffrage and the vote on the liquor question.* Quart. Pubs. Am. Stat. Assoc., Mar., 1917. Pp. 9.

High correlation found between votes for suffrage and for prohibition in Cleveland.

GILLETTE, J. M. *A study in social dynamics: a statistical determination of the rate of natural increase, and of the factors accounting for the increase of population in the United States.* Quart. Pubs. Am. Stat. Assoc., Dec., 1916. Pp. 36.

A praiseworthy and painstaking attempt to estimate the rate of natural increase of the population of the United States for the decade 1900-1910, together with special inquiries into rural increase, rural migration, and interdivisional migration. Involves, of necessity, the use of some exceedingly questionable estimates.

KENNELLY, A. E. (and others). *The adoption of the metric system in the United States.* Sci. Mo., Mar., 1917. Pp. 28.

KOHS, S. C. *The intelligence quotient and borderlinity.* Journ. Delinquency, Jan., 1917. Pp. 9.

From a statistical study of 375 cases it is concluded that the intelligent quotient (ratio of actual age to "mental age") is of much significance, but will not definitely set a dividing line between normality and feeble-mindedness.

KOPF, E. W. *Florence Nightingale as statistician.* Quart. Pubs. Am. Stat. Assoc., Dec., 1916. Pp. 17.

An account of an enormous amount of pioneer work in the field of sanitary statistics. Assigns Miss Nightingale "a position in the history of social statistics next to those occupied by Quetelet and Farr."

KING, W. I. *Desirable additions to statistical data on wealth and income.* Quart. Pubs. Am. Stat. Assoc., Mar., 1917. Pp. 17.

Proposes a census of incomes and a centralization of work now being done by various federal and state bureaus.

KREHBIEL, E. *Geographic influences in British elections.* Geog. Rev., Dec., 1916. Pp. 14.

A study of the distribution of votes in the eight general parliamentary elections since 1885. With excellent colored map and key-chart.

LE ROY, J. *Desarrollo de estadística demográfica en la Isla de Cuba.* Ref. Soc. (Cuba), Sept.-Oct.-Nov., 1916. Pp. 14, 26, 17.

The development of statistical agencies and methods in Cuba.

LIVA, L. *Osservazioni critiche sulla interpolazione di serie statistiche in demografia.* Riv. Intern., Oct., 1916. Pp. 13.

MALLET, B. *The organization of registration in its bearing on vital statistics.* Journ. Royal Stat. Soc., Jan., 1917. Pp. 30.

Presidential address before the Royal Statistical Society, by the Registrar-General. The registration record should be "a more complete documentary identification of the individual," and should "point directly to the previous step in the family history." The public health service should be utilized in the work of registration and the existing administrative divisions should supplant the old Poor-Law areas. A quinquennial census is advocated.

MARCH, L. *Le mouvement des prix de gros depuis 1914, avec rappel du mouvement général des prix depuis 125 ans.* Bull. Stat. Gén., Oct., 1916. Pp. 22.

Unweighed arithmetic means of relative prices, with prices for 1901-1910 used as base. The recent rise of prices has been greater in France than in England, but reached an apparent maximum in April, 1916. Various index numbers are pieced together to show the general movement of prices in France, England, and the United States during the nineteenth century.

M. H. *Coût de la vie.* Bull. Stat. Gén., July, 1916. Pp. 4.

Increase of cost of living in Switzerland, from June, 1914, to June, 1916, was about 40 per cent. In the October number of the same journal there is an account of a recent Austrian inquiry.

M. H. *Tables de mortalité (Norvège), 1901-02 to 1910-11.* Bull. Stat. Gén., July, 1916. Pp. 2.

Review of new Norwegian life tables contracted by Rygg.

OGBURN, W. F., and KELLY, E. *Wages in American cities.* Quart. Pubs. Am. Stat. Assoc., Sept., 1916. Pp. 5.

Other tests confirm the substantial accuracy of 37 cities with respect to the average union wages paid in 10 trades.

ROTH, H. L. *The application of statistics to advertising and marketing.* Quart. Pubs. Am. Stat. Assoc., Dec., 1916. Pp. 30.

The use of statistics in planning advertising campaigns and checking their results.

SAVORNAN, F. *L'ammontare e la composizione della ricchezza in Italia e nelle sue regioni.* Riv. Ital. di Soc., May-Aug., 1916. Pp. 17.

Chiefly an analysis of a recent book by Gini.

STONE, N. I. *Need of standardization of methods for measuring regularity of employment.* Quart. Pubs. Am. Stat. Assoc., Sept., 1916. Pp. 6.

A tabulation by the writer of fluctuations of employment and wages (Bulletin 146 of the United States Bureau of Labor Statistics) gave misleading results, because conditions in each week were represented by a per cent of conditions in the busiest week of the year for the industry as a whole instead of for individual shops.

WATKINS, G. P. and LUBARSKY, L. H. *Consumption of gas as affected by population.* Quart. Pubs. Am. Stat. Assoc., Dec., 1916. Pp. 12.

An able study, utilizing statistics of gas consumption in Manhattan Borough in successive years and in various localities in Massachusetts in 1910. Consumption varies, of course, inversely with price, and price varies inversely with population, but it seems probable also that "mere aggregation of population does tend to increase gas consumption somewhat."

WESTERGAARD, H. *Scope and method of statistics.* Quart. Pubs. Am. Stat. Assoc., Sept., 1915. Pp. 44.

An important paper. Comprises a masterly summary of the history of statistics, a plea for the larger use of "representative statistics" (samples), a discussion of the margin of error and of the validity of conclusions drawn from imperfect statistics, considerations respecting the use of the law of error (in its binomial form), an insistence upon the necessity of resolving statistics into homogeneous groups before drawing inferences from them, an exposition of the utility of certain simple mathematical methods, and an expression of skepticism with reference to the utility of highly-elaborated mathematical methods. With introduction by W. F. Willcox, and comment by W. M. Persons, J. H. Parmelee, C. J. West, and G. P. Watkins.

YOUNG, A. A. *Do the statistics of the concentration of wealth in the United States mean what they are commonly assumed to mean?* Quart. Pubs. Am. Stat. Assoc., Mar., 1917. Pp. 14.

No single measure of "concentration" is adequate. The "skewness" of income distribution is more significant. Annual accruals of appreciation should be counted in income statistics. Probate records do not reflect the distribution of wealth among the living population.

Enquête sur les prix de vente au détail de certaines denrées dans les villes françaises de plus de 10,000 inhabitants. Bull. Stat. Gén., July, 1916. Pp. 20.

Results of questionnaires sent to the officials of French cities. An average for eleven principal articles of consumption (weighted according to importance in workmen's budgets) shows a rise of about 40 per cent between October 1, 1914, and July 1, 1916.

Mouvement économique général. Bull. Stat. Gén., July, Oct., 1916.

Attention again called to this very convenient summary of current economic and financial statistics for European countries.

FOURTEENTH LIST OF DOCTORAL DISSERTATIONS IN POLITICAL ECONOMY IN PROGRESS IN AMERICAN UNI- VERSITIES AND COLLEGES

Students whose period of continuous non-residence exceeds three years are omitted from the list. The last date given is the probable date of completion.

The first list of this kind was dated January 1, 1904, and was sent to all members, but not regularly bound in the publications. The subsequent lists have appeared in the publications as follows: Second list, 1905, in third series, vol. iv, p. 737; third list, 1906, in third series, vol. vii, no. 3, supplement, p. 43; fourth list, 1907, in third series, vol. viii, no. 2, supplement, p. 42; fifth list, 1908, in the *Bulletin* for April, 1908, p. 69; sixth list, 1909, in the *Bulletin* for April, 1909, p. 16; seventh list, 1910, in the *Bulletin* for March, 1910, p. 12; eighth list, 1911, in the *REVIEW* for March, 1911, p. 212; ninth list, 1912, in the *REVIEW* for June, 1912, p. 519; tenth list, 1913, in the *REVIEW* for June, 1913, p. 527; eleventh list, 1914, in the *REVIEW* for June, 1914, p. 524; twelfth list, 1915, in the *REVIEW* for June, 1915, p. 476; thirteenth list, 1916, in the *REVIEW* for June, 1916, p. 499.

Theory and Its History

- HERMANN FRANKLIN ARENS, A.B., Harvard, 1907; A.M., 1913. The limits of state interference. *Harvard*.
- C. E. AYRES, A.B., Brown, 1912; A.M., 1914. A study of certain relations between ethics and economics. 1917. *Chicago*.
- H. E. BARNES, A.B., Syracuse, 1913; A.M., 1914. The contribution of sociology to the history of political theories. 1917. *Columbia*.
- WILBUR PERE CALHOUN, Ph.B., Hiram, 1913; A.M., Michigan, 1914. The concept of surplus in modern theories of distribution. 1918. *Michigan*.
- ZENA CLARK DICKINSON, A.B., Nebraska, 1914. Relations of psychology and economics. *Harvard*.
- EARL VINCENT DYE, A.B., Columbia, 1910. Economic theories of Pelatiah Webster. 1918. *Columbia*.
- ALFRED P. HAAKE, B.A., Wisconsin, 1914; M.A., 1916. Theories of progress 1918. *Wisconsin*.
- JOSEPH BRADLEY HUBBARD, A. B., Wisconsin, 1912; A.M., 1913. History of economic thought during the Middle Ages. *Harvard*.
- HOMER HOYT, A.B., Kansas, 1913; A.M., 1913. The specific productivity theory. 1917. *Chicago*.
- FRANK H. KNIGHT, B.S., Tennessee, 1913; A.M., 1913. Theory of business profits. 1916. *Cornell*.
- S. LEON LEVY, A.B., College of the City of New York, 1908. Life and work of Nassau William Senior. 1918. *Columbia*.

- WILLIAM MELCHER, A.B., Drury, 1911; A.M., 1912. Some aspects of the theory of progress. *Harvard*.
- FREDERICK C. MILLS, A.B., California, 1914; A.M., 1916. Contemporary theories of unemployment and of unemployment relief. 1917. *Columbia*.
- JAMES ERNEST MOFFAT, A.B., McMaster, 1914; A.M., Chicago, 1916. A history and criticism of the theory of diminishing returns. 1918. *Chicago*.
- MYRON W. WATKINS, A.B., Michigan, 1914. The work of J. B. Say. 1917. *Cornell*.
- HEISKELL BRYAN WHALING, B.A., Texas, 1910; M.A., 1912. Fair value: economic and legal principles. 1917. *Wisconsin*.

Economic History and Geography

- CLEMENT AKERMAN, A.B., Georgia, 1898. Studies in the economic history of the Pacific Northwest. *Harvard*.
- BIHIMRAO RAMJI AMBEDKAR, A.B., Bombay, 1912. Financial history of India. 1918. *Columbia*.
- JESSE H. BAXTER, B.S., Columbia, 1913; A.M., 1914. Economic changes in the South since the Civil War. 1917. *Columbia*.
- GLEN ROY BEDENKAPP, A.B., Hamilton, 1912. Economic aspects of the campaign of 1860. 1917. *Columbia*.
- ANNIE CATHERINE BAZANSON, A.B., Radcliffe, 1915. The Industrial Revolution in France. 1918. *Radcliffe*.
- R. G. BOOTH, A.B., Illinois Wesleyan, 1914; A.M., Columbia, 1915. Some social aspects of the development of the natural sciences in England in the eighteenth century. 1917. *Columbia*.
- W. SCOTT BOYCE, A.B., Wake Forest, 1903; A.M., Chicago, 1907. The economic and social history of Chowan county, North Carolina, since 1880. 1917. *Columbia*.
- J. B. BOTSFORD, A.B., Columbia, 1915. The social influence of oversea expansion on England in the eighteenth century. 1917. *Columbia*.
- HARRIET BRADLEY, A.B., Vassar, 1913; A.M., Columbia, 1915. English enclosures. 1917. *Columbia*.
- R. S. CASTLEMAN, Ph.B., Chicago, 1914. Early emigration from Spain to America. 1918. *Chicago*.
- FREDERICK CHARLES DIETZ, A.B., Pennsylvania, 1909; A.M., Harvard, 1912. The condition of the peasant in Württemberg and the peasant revolt of 1525. *Harvard*.
- SAMUEL GLOVER DUNSEATH, A.B., Ursinus, 1910; A.M., Columbia, 1911. An economic interpretation of Hebrew history from the Egyptian bondage to the fall of Jerusalem in 70 A.D. 1917. *Columbia*.
- EDGAR STEVENSON FURNISS, B.A., Coe College, 1911. The social position of the English laborer in the eighteenth century. 1918. *Yale*.

- HOWARD CHARLES GREEN, A.B., College of the City of New York, 1902. The radical movement of the American Revolution. 1917. *Columbia*.
- LELAND JENKS, A.B., Ottawa, 1913; A.M., Kansas, 1914. Social aspects of the Revolution of 1688-1689 in England. 1917. *Columbia*.
- FRANKLIN JOHNSON, JR., A.B., Chicago, 1895; A.M., Columbia, 1898; LL.B., 1898. The development of statute law concerning the negro. 1917. *Columbia*.
- CHARLES H. HIGGINS, C.E., Princeton, 1903. The economic relations between city-merchants-customers in a public market, as illustrated by the one hundred year old Washington market in the City of New York. 1917. *Columbia*.
- HOWARD C. KIDD, A.B., Geneva, 1909; A.M., Columbia, 1911. The development of laissez-faire to legislative control in the United States. 1917. *Columbia*.
- A. S. KRAVITZ, Gymnasium, Libau, Russia, certificate; A.B., University of Berne. The peace movement and its relations to the world economy. 1918. *Columbia*.
- MARY J. LANIER, S.B., Chicago, 1909. Geographical influences on the development of New England seaports. 1917. *Chicago*.
- L. A. LAWSON, A.B., Upsala, 1909; A.M., Columbia, 1911. Social conditions in the Principate of Augustus. 1917. *Columbia*.
- M. F. LAWTON, A.B., Columbia, 1904; A.M., 1912. Philanthropy in Rome and Italy under the Early Roman Empire. 1917. *Columbia*.
- MARY V. LIPE, A.B., Barnard, 1907; A.M., Columbia, 1913. The economic status of the women of the southern states since the Civil War. 1917. *Columbia*.
- MAY BAKER MARSH, A.B., Michigan, 1908; A.M., 1910. Folkways in art. *Columbia*.
- BROADUS MITCHELL, B.A., South Carolina, 1913. The rise of cotton mills in the South. 1918. *Johns Hopkins*.
- J. W. MORGAN, B.A., Richmond, 1899; Crozer Theological Seminary, 1914. Social characteristics of a Virginia foothill township. *Wisconsin*.
- CLARENCE HUNTER NORTHCOTT, A.B., Sydney, 1905; A.M., 1916. Ideals of democratic efficiency in Australia. 1918. *Columbia*.
- C. H. PANCKOKE, A.B., Concordia, 1905. The interrelation of the reformation and the social movement in Saxony. 1917. *Columbia*.
- J. H. PARK, A.B., Columbia, 1912; A.M., 1913. The English reform bills of 1866-67. 1917. *Columbia*.
- NORMAN S. PARKER, A.B., Chicago, 1911; A.M., Harvard, 1912. Trade routes in southern France in the Middle Ages. 1917. *Chicago*.
- GEORGE HERBERT ROLLER, A.B., Ph.B., Northwestern College, 1910. The general economic theories underlying the decisions of the Supreme Court. 1918. *Columbia*.

- R. R. RUSSEL, A.B., McPherson, 1914; A.M., Kansas, 1915. Southern feeling before 1861 regarding the industrial and commercial superiority of the North. 1918. *Illinois*.
- W. B. SMITH, A.B., Chicago, 1902. White servitude in South Carolina. 1917. *Chicago*.
- PETER ALEXANDER SPEEK, M.A., Wisconsin, 1911. The single tax and the labor movement (historical sketch, 1881-1886). To be published by the University as a bulletin. *Wisconsin*.
- CHARLES WOOD SUTTON, B.S., University of Washington. The development policy of Latin America; its economic, political, and social effects and its influence upon international relations. 1917. *Columbia*.
- EN SAI TAI, A.B., St. John's College (Shanghai), 1913; A.M., Columbia, 1915. The international law of Confucius. 1917. *Columbia*.
- J. FRANKLIN THOMAS, A.B., Beloit, 1904. Theories concerning the influence of physical environment upon society. 1918. *Columbia*.
- W. A. TILLEY, A.B., McMaster, 1910; Th.B., 1912; A.M., Chicago, 1915. Attitude of eastern churchmen of the fourth century toward property and property rights. 1918. *Chicago*.
- F. J. TSCHAN, A.B., Loyola, 1901; A.M., 1913. The Virginia plantation. 1917. *Chicago*.
- L. E. YOUNG, S.B., Utah, 1895. The social and economic development of Utah under the leadership of Brigham Young. 1917. *Columbia*.

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- EDWARD D. BAKER, A.B., Chicago, 1903; A.M., Columbia, 1913. The price, production, and sale of hard winter wheat in the United States. 1917. *Chicago*.
- JOHN DONALD BLACK, B.A., Wisconsin, 1909; M.A., 1910. Land tenure in America. 1917. *Wisconsin*.
- MERTON KIRK CAMERON, A.B., Princeton, 1908; A.M., Harvard, 1914. History of the tobacco growing industry in the United States. *Harvard*.
- WILLIAM WILSON CUMBERLAND, A.B., Occidental, 1912; A.M., Columbia, 1913. Coöperation in the California citrus industry. 1917. *Princeton*.
- HARRY ERNST ERDMAN, B.S., South Dakota State College, 1912. Coöperative and municipal marketing of whole milk in the United States and abroad. 1917. *Wisconsin*.
- WILBER JOHN FRASER, A.B., Illinois, 1893; S.M., 1902. Farm incomes in the dairy regions about the Elgin district in Illinois. *Harvard*.
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- WILLIAM E. GARNETT, B.A., Cornell, 1913; M.A., Peabody, 1916. Rural social survey of Albemarle county, Virginia. *Wisconsin*.

- H. B. HALL, S.M., Massachusetts Agricultural, 1912. The history of American agriculture from 1890 to 1910. *Harvard*.
- ASHER HOBSON, B.A., Kansas, 1914; M.A., Wisconsin, 1915. The direct marketing of farm products. *Wisconsin*.
- CLARENCE L. HOLMES, B.A., Michigan. History of land tenure in South Dakota. 1917. *Wisconsin*.
- GEORGE H. NEWLOVE, Ph.B., Hamline, 1914; A.M., Minnesota, 1915. Economic history of agriculture in Illinois. 1918. *Illinois*.
- HUGH BRUCE PRICE, B.A., Wisconsin, 1914; M.A., Minnesota, 1916. The inspection and grading of grain. 1918. *Yale*.
- FREDERIC EARNEST RICHTER, A.B., Harvard, 1913. The copper industry. *Harvard*.
- O. C. STINE, Ph.B., Ohio, 1908. Economic history of corn products in the United States. *Wisconsin*.
- RALEIGH W. STONE, M.S., Valparaiso, 1914. The rural survey. 1917. *Chicago*.
- THOMAS JACKSON WOOFER, JR., A.B., Georgia, 1912. Negro farm life in Georgia. 1918. *Columbia*.
- HOLBROOK WORKING, A.B., Denver, 1915. A study of the economic effects of government aid to agriculture. 1919. *Cornell*.

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- HARRY ALONZO BRANDT, B.A., Pomona, 1914. The hide and leather trade. 1919. *Yale*.
- ALZADA COMSTOCK, A.B., Mt. Holyoke, 1910; A.M., Columbia, 1913. The newspaper publishing business. 1918. *Columbia*.
- MARGARET CHASE GOING, B.A., McGill (Montreal), 1912; M.A., 1913. The furniture industry. 1917. *Chicago*.
- ALEXANDER C. GOURVITCH, Bachelier ès Lettres, University of Paris, 1910; Diplôme d'Etude Supérieure, 1911; Licencié ès Lettres. Some aspects of the clothing industry. 1918. *Columbia*.
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- ERNEST HERMAN HAHNE, A.B., Nebraska, 1911; LL.B., 1913; A.M., Harvard, 1914. The history of the meat packing industry in the United States. *Harvard*.
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- ROBERT ELWOOD MOORE, A.B., Wesleyan, 1915; A.M., 1916. An investigation of the relation of iron prices to business conditions. 1919. *Columbia*.

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- BASCOM W. BARNARD, A.B., Trinity (N. C.), 1915; A.M., 1916. Government improvement of rivers and harbors. *Princeton*.

- H. A. BLANKENSHIP, A.B., Marietta, 1914. The Georgian Bay ship canal. 1918. *Chicago*.
- ALBERT BRADLEY, B.S., Dartmouth, 1915; A.M., Michigan, 1916. The separation of freight and passenger expenses: A study in the cost theory of railroad rates. 1917. *Michigan*.
- CHARLES CLOYD CREEKPAUM, A.B., Nebraska, 1912. Financial results of state railways. *Harvard*.
- HOWARD DOUGLAS DOZIER, B.A., Vanderbilt, 1908; M.A., Yale, 1916. History of the Atlantic Coast Line System. 1918. *Yale*.
- ROBERT CRAIG EFFINGER, A.B., Virginia, 1914. Railways and business cycles. 1917. *Columbia*.
- M. B. GLAESER, B.A., Wisconsin, 1912. The cost of service principle in railroad rate-making. *Wisconsin*.
- ROBERT LEE HALE, A.B., Harvard, 1906; A.M., 1907; LL.B., 1909. Rate making valuation: its constitutional ambiguity and its misapplication in Wisconsin. 1917. *Columbia*.
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- PAUL WESLEY IVEY, A.B., Lawrence, 1912; A.M., Illinois, 1913. History of the Pere Marquette Railroad Company. 1917. *Michigan*.
- LEONARD B. KRUEGER, Ph.B., Wisconsin, 1914; M.A., Pennsylvania, 1915. The regulation of ocean traffic. 1918. *Wisconsin*.
- R. R. PAWAR, A.B., Bombay, 1905; LL.B., 1908; A.M., New York University, 1915. The history of railways in British India. 1918. *Columbia*.
- WESLEY EVERETT RICH, A.B., Wesleyan, 1911; A.M., 1912. The history of the post office in the United States. *Harvard*.
- CHARLES WESLEY SARGENT, A.B., Dartmouth, 1915; A.M., 1916. The trend of federal regulation of railroads. 1918. *Michigan*.
- W. M. W. SPLAWN, A.B., Baylor, 1906; A.B., Yale, 1908; A.M., 1914. A study of the railroad commission of Texas. 1917. *Chicago*.
- RALPH BYRON WILSON, A.B., Ohio State, 1908; A.M., 1910. The practical problems of railroad operation. *Harvard*.

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- RALPH EASTMAN BADGER, B.A., Dartmouth, 1913; M.C.S., 1914. A study in the marketing of raw silk and silk products in the United States. 1918. *Yale*.
- O. G. CARTWRIGHT, A.B., Yale, 1893; A.M., 1901. A history of the American consular system. 1917. *Columbia*.
- WILLIAM H. DRESEN, A.B., Greenville, 1907; A.M., Illinois, 1916. Legislation regulating mercantile business in Illinois from 1860 to date. 1918. *Illinois*.

- WILFRED ELDRED, A.B., Washington and Lee, 1909; A.M., Harvard, 1911. Wheat production and the wheat and flour trade in the United States since 1860. *Harvard*.
- MARJORIE LORNE FRANKLIN, A.B., Barnard, 1913; A.M., Columbia, 1916. The most favored nation clause in commercial treaties. 1918. *Columbia*.
- LORAIN FORTNEY, LL.B., West Virginia, 1900; A.B., 1900. Warehousing. 1918. *Chicago*.
- ALVIN HANSEN, B.A., Youngston, 1910; M.A., Wisconsin, 1915. Some phases of the business cycle. *Wisconsin*.
- HARRY JEROME, B.A., Omaha, 1912; M.A., Wisconsin, 1915. The development of the concept of unfair competition. 1918. *Wisconsin*.
- ROBERT ALLEN LESHER, B.S., Lafayette, 1908; S.B., Massachusetts Institute of Technology, 1914. A comparative study of American port revenues and expenditures. 1917. *Columbia*.
- FREDERICK R. MACAULAY, A.B., Colorado, 1911; LL.B., 1911; A.M., 1911. The credit features of business cycles. 1917. *Columbia*.
- REID LAGE MCCLUNG, A.B., Morris Harvey, 1904. Unfair methods of competition. 1918. *Cornell*.
- WILLIAM CHARLES SCHLUTER, A.B., Iowa State, 1915; A.M., Columbia, 1916. A study in business cycles: the industrial conditions of Germany, France, England, and the United States from 1907 to July, 1914. 1918. *Columbia*.
- CHONG SU SEE, B.S., Columbia, 1915; A.M., 1916. The foreign trade of China. 1918. *Columbia*.
- LILLIAN SOSKIN, A.B., Barnard, 1915. Panic of 1907. 1917. *Columbia*.
- REXFORD G. TUGWELL, B.S., Pennsylvania, 1915; A.M., 1916. The public interest and the price for milk. 1918. *Pennsylvania*.
- JACOB VINER, A.B., McGill, 1914; A.M., Harvard, 1915. Trade balances and their significance. *Harvard*.
- HAROLD B. WARD, S.B., Chicago, 1914. Geographic influences in the trade between the United States and South America. 1917. *Chicago*.
- JOHN HENRY WILLIAMS, A.B., Brown University, 1912. Argentine trade. *Harvard*.
- KWEU E. YANG, A.B., St. John's College (China), 1909; A.M., Columbia, 1913. The commercial relations between China and the West. 1917. *Columbia*.

Accounting, Business Methods, Investments, and the Exchanges

- JAMES CUNNINGHAM BONBRIGHT, A.B., Northwestern, 1913. Commission regulation of public utility securities. 1917. *Columbia*.
- GEORGE EVERITT GILL, A.B., Indiana, 1912. Trade and technical journals as factors in modern business. 1917. *Columbia*.
- EDGAR H. GUSTAFSON, B.A., North Dakota, 1915; M.A., 1916. Economic principles in the valuation of public service corporations. *Wisconsin*.

- GOULD L. HARRIS, B.A., Ohio State, 1914; A.M., 1916. Department store accounting. *Ohio State*.
- ROY BERNARD KESTER, A.B., Missouri Wesleyan, 1902; B.C.S., Denver, 1911; A.M., 1912. A study in the valuation of a commercial balance sheet. 1917. *Columbia*.
- CLAUDE T. MURCHISON, A.B., Wake Forest, 1911. Resale price maintenance. 1917. *Columbia*.
- WILLIAM ANDREW PATON, A.B., Michigan, 1915; A.M., 1916. The theory of accounts. 1917. *Michigan*.
- JACOB HYMAN SCHMUCKLER, B.S., Columbia, 1914; A.M., 1915. Essays in corporation finance. 1918. *Columbia*.
- JONAS WARREN STEHMAN, A.B., Lebanon Valley, 1909; A.M., Pennsylvania, 1910. Government regulation of the securities of public utilities. *Harvard*.
- CHARLES DEDERER THOMPSON, A.B., Princeton, 1905. Land value and land speculation. 1918. *Columbia*.

Capital and Capitalistic Organizations

- MARY LOUISE BARRON, B.S., California, 1911; M.S., 1913. Public regulation of securities of railroad and public service companies. 1917. *Pennsylvania*.
- BERT C. FULLER, A.B., Cornell, 1894; LL.B., 1895. Restraint of trade at common law and under the Sherman anti-trust law. 1917. *Columbia*.
- GEORGE E. GEPIHART, B.A., Ohio State, 1915. The holding company. *Ohio State*.
- O. H. LUKEN, A.M., New York University, 1915. German kartels and the policy of the German government toward them. 1917. *Columbia*.
- KEMPER SIMPSON, B.A., Johns Hopkins, 1914. Industrial flotations in United States. 1917. *Johns Hopkins*.
- L. C. SORRELL, A.B., Colgate, 1911. State anti-trust legislation and its results. 1917. *Chicago*.
- MERLE RAYMOND THOMPSON, A.B., Western Union, 1913; M.A., Iowa, 1915. Trust dissolution. 1917. *Iowa*.
- FLOYD L. VAUGHAN, B.A., Texas, 1913; M.A., 1914. Relation of patents to industrial monopolies. 1918. *Wisconsin*.

Labor and Labor Organizations

- JOSHUA BERNHARDT, B.A., Rochester, 1916. The influence of the immigrant upon American labor organizations. 1919. *Johns Hopkins*.
- F. H. BIRD, B.A., Dartmouth, 1909; M.A., 1910. The Belgium superior council of labor and American analogies. *Wisconsin*.
- CLARENCE E. BONNETT, S.B., Missouri, 1908. Employers' associations. 1917. *Chicago*.
- CLYDE ELMORE BURGEE, B.A., Western Maryland College, 1914. Social aspects of trade unionism. 1919. *Johns Hopkins*.

- WARREN B. CATLIN, A.B., Nebraska, 1903. The labor movement; its roots and branches. 1917. *Columbia*.
- PAUL HOWARD DOUGLAS, A.B., Bowdoin, 1913. The apprenticeship system in American industry. 1917. *Columbia*.
- CLYDE OLIN FISHER, A.B., Trinity College (N. C.), 1911; A.M., Columbia, 1916. Federal power in railway labor disputes. 1918. *Cornell*.
- ALEXANDER FLEISHER, A.B., Pennsylvania, 1908; A.M., Wisconsin, 1911. The enforcement of labor laws with special reference to child labor. 1917. *Columbia*.
- PHILIP SARGENT FLORENCE, A.B., Cambridge, 1913; A.M., 1916. Industrial fatigue and its business significance. 1917. *Columbia*.
- BENJAMIN GLASSBERG, A.B., College of the City of New York, 1910; A.M., Columbia, 1914. Federal labor legislation of the twentieth century. 1917. *Columbia*.
- ETHEL LIZZIE GOODWIN, A.B., Barnard, 1909; A.M., Columbia, 1910. The regulation of wages through boards as a remedy for the sweating system. 1917. *Columbia*.
- E. T. HILLER, S.B., Northwestern, 1912; A.M., 1913. The technique of the strike—a social psychological study. 1917. *Chicago*.
- HENRY ELMER HOAGLAND, A.B., Illinois, 1910; A.M., 1910. Collective bargaining in the lithographic industry. 1917. *Columbia*.
- STANLEY EDWIN HOWARD, A.B., Bates, 1910; A.M., Princeton, 1913. Wages in the New England cotton industry. 1917. *Princeton*.
- C. ROLAND HUGINS, A.B., Cornell, 1911. The use of armed force in labor disputes. 1918. *Cornell*.
- EMILIE JOSEPHINE HUTCHINSON, A.B., Barnard, 1905; A.M., Columbia, 1908. Women's wages in the United States. 1917. *Columbia*.
- RICHARD HINES LANSEBURGH, B.S., Pennsylvania, 1915; A.M., 1916. Labor turnover. 1918. *Pennsylvania*.
- THOMAS ERNEST LARKIN, A.B., St. Mary's College (Kansas), 1915. Apprenticeship and trade agreements. 1918. *Catholic University*.
- E. D. LUCAS, A.B., Wooster, 1903; A.M., Columbia, 1908; B.D., Union, 1907. Industrial development in the Punjab, India. 1919. *Columbia*.
- JAMES HUGH MCKEAN, B.A., Michigan, 1916. Trade unions and the working day. 1919. *Johns Hopkins*.
- ROBERT LOUIS MASSON, B.A., Iowa, 1912; M.A., 1915. History of federal labor legislation. 1917. *Harvard*.
- EDITH M. MILLER, B.L., Ohio Wesleyan, 1907. The organization of the labor market in Columbus, Ohio. 1918. *Columbia*.
- FRIEDA SEGELKE MILLER, A.B., Milwaukee-Downer, 1911. A theory of the development of trade unionism in the United States. 1917. *Chicago*.
- CHARLES REITELL, B.S., Pennsylvania, 1910; A.M., 1916. Machinery and its

benefits to labor in the crude iron and steel industries. 1917. *Pennsylvania*.

JESSE SQUIBB ROBINSON, B.A., Alleghany, 1911. The iron, steel, and tin workers: a study in trade unionism. 1917. *Johns Hopkins*.

ALEXANDER ROSEN, A.B., College of the City of New York, 1904; A.M., Columbia, 1909. The influences of recent economic changes upon the development of the American trade union movement. 1917. *Columbia*.

JACOB B. SALUTSKY, Gymnasium (Russia), 1904. The Jewish labor movement in the United States. 1917. *Columbia*.

SUMNER SLICHTER, B.A., Wisconsin, 1913; M.A., 1914. The turnover of labor and industry. *Chicago*.

MARGARET LOOMIS STECKER, A.B., Cornell, 1906. The National Founders' Association. 1917. *Cornell*.

CHARLES J. STOWELL, B.S., Illinois Wesleyan, 1911; A.M., Illinois, 1912. The Journeymen Tailors' Union of America: a study in trade union policy. 1917. *Illinois*.

DONALD REED TAFT, A.B., Clark, 1914. The rôle of sympathy in labor organizations. 1918. *Columbia*.

JOHN ARCHIBALD WALKER, A.B., St. Francis Xavier's College (Antigonish, Nova Scotia), 1910. Conciliation and compulsory investigation of labor disputes in Canada. 1918. *Catholic University*.

EDWIN EMIL WITTE, B.A., Wisconsin, 1909. Courts and labor disputes. *Wisconsin*.

Money, Prices, Credit, and Banking

GORDON BLYTHE ANDERSON, B.S., Pennsylvania, 1913; A.M., 1915. Clearing and collection of checks in the United States. 1917. *Pennsylvania*.

CARL MARTIN BURKE, A.B., Bethany, 1912; A.M., Kansas, 1913. A study of discount policies. 1918. *Cornell*.

NEIL CAROTHERS, B.A., Arkansas; diploma in economics, Oxford (England), 1907. Fractional currency in the United States. 1917. *Princeton*.

CHARLES DICE, B.A., Ohio Northwestern, 1905; M.A., Northwestern University, 1913. New factors affecting the motive to save. *Wisconsin*.

JOHN F. EBERSOLE, Ph.B., Chicago, 1907; A.M., Harvard, 1909. The history of the national banking system, 1864-1874. 1917. *Chicago*.

FRANK DUNSTONE GRAHAM, A.B., Dalhousie, 1913; LL.B., 1915. Period of suspension of specie payments in the United States 1862-1879. *Harvard*.

LUTHER H. GULICK, A.B., Oberlin, 1914; A.M., 1915. Municipal pawnshops. 1917. *Columbia*.

R. MILTON McISAAC, A.B., Geneva, 1915; A.M., Princeton, 1916. The development of commercial paper in relation to American banking. 1918. *Princeton*.

- ARTHUR ELI MUNROE, A.B., Harvard, 1908; A.M., 1914. Discussion of money and banking in the American colonies. *Harvard*.
- H. N. POTTER, A.B., Arkansas, 1914. Commercial paper houses. 1918. *Chicago*.
- JESSE HALE RIDDLE, A.B., Davis-Elkins, 1912; A.M., Princeton, 1915. History of state banks and trust companies in New Jersey. 1918. *Princeton*.
- THOMAS BRUCE ROBB, B.A., Park College, 1912; M.A., Yale, 1914. Government insurance of bank deposits in the United States. 1919. *Yale*.
- OSCAR BAXTER RYDER, A.B., Richmond College, 1908; A.M., 1909. History of banking in Virginia. *Harvard*.
- DONALD SKEELE TUCKER, A.B., Colorado, 1906; A.M., Williams, 1912. History of coöperative banking up to 1900. 1917. *Columbia*.
- CHI CHIH WANG, Manchuria. Monetary reform in Japan. 1918. *Columbia*.
- HERMAN WARSHOW, A.B., Cornell, 1916. The effects of the federal reserve system on bank credit. 1919. *Cornell*.

Public Finance, Taxation, and Tariff

- ISRAEL SAMUEL ADLERBLUM, A.B., College of the City of New York, 1908; A.M., Columbia, 1909. The supervision and taxation of life insurance companies. 1917. *Columbia*.
- FRANK FERRIS ANDERSON, A.B., Minnesota, 1908. The industrial claims of the single-taxers. 1917. *Columbia*.
- WILLIAM BURKE BELKNAP, A.B., Yale, 1908. The financial history of Kentucky. *Harvard*.
- JAMES WASHINGTON BELL, A.B., Colorado, 1912; A.M., 1913. Taxation of railroads. *Harvard*.
- JAMES W. BELL, A.B., Mississippi, 1898; A.M., 1909. The general property tax of Mississippi: its failure and some proposed substitutes. 1918. *Columbia*.
- ARTHUR EUGENE BUCK, Ph.B., Milligan, 1910; B.S., Tennessee, 1913. Operation of the Edge budget law in New Jersey. 1917. *Columbia*.
- ROBERT ARGYLL CAMPBELL, A.B., Wisconsin, 1906. Taxation in Indiana. 1917. *Cornell*.
- DUDLEY DEWITT CARROLL, A.B., Guilford, 1907; Haverford, 1908. The history of taxation in North Carolina. 1917. *Columbia*.
- LEGRAND REX DROWN, A.B., Wooster, 1915; A.M., Columbia, 1916. The validity of the pay-as-you-go policy in public school outlays. *Columbia*.
- FREDERIC B. GARVER, A.B., Nebraska, 1909. The subvention in American state finance. 1917. *Chicago*.
- LOUIS GOTTLIEB, A.B., Rochester, 1914. Forest taxation. 1917. *Columbia*.
- LLOYD FRED HERRETT, B.L., Ohio Wesleyan, 1913. Standardization of governmental functions. 1917. *Columbia*.

- MERLIN H. HUNTER, A.B., Muskingum, 1912; A.M., Princeton, 1913. The development and problems of the New York state corporation tax. 1916. *Cornell*.
- CLARENCE HEER KAISER, A.B., Rochester, 1914. Taxable income. 1917. *Columbia*.
- JOHN LEWIS KEDDY, A.B., Hamilton, 1915; A.M., Columbia, 1916. Preparations of estimate for state appropriations. 1917. *Columbia*.
- JOHN EMMETT KIRSHMAN, Ph.B., Central Wesleyan, 1904; Ph.M., Syracuse, 1908. Taxation of corporations. *Harvard*.
- EDMOND EARLE LINCOLN, A.B., Ohio Wesleyan, 1910; A.B., Oxford, 1910; A.M., 1914. The financial results of state industry. *Harvard*.
- ROWLAND ROBBINS McELVARE, A.B., Columbia, 1913; A.M., Columbia, 1914. Public debts of Europe in recent times. 1917. *Columbia*.
- MARION O'KELLIE MCKAY, S.B., Ohio Northern, 1907; A.B., Ohio State, 1910; A.M., Harvard, 1912. The poll tax in the United States. *Harvard*.
- REUBEN MCKITRICK, B.A., Oklahoma, 1907. Public land system of Texas 1823-1910. Completed. *Wisconsin*.
- CHARLES STILLMAN MORGAN, B.A., Michigan, 1914. A statistical analysis of the increase in American public expenditures. 1919. *Yale*.
- SHANKAR MADHAR PAGAR, A.B., Wisconsin, 1914; A.M., Colorado, 1915. The Indian income tax. Its history, theory, and practice. 1917. *Columbia*.

Population and Migration

- LEROY EDWARD BAUMANN, A.B., Chicago, 1912. Race amalgamation in Greenpoint (Brooklyn) as affected by leadership. 1917. *Columbia*.
- STANLEY P. DAVIES, A.S., Bucknell, 1912. Racial assimilation in a community in the anthracite coal region. 1917. *Columbia*.
- J. L. DEMING, A.B., Cincinnati, 1899; A.M., Bethany, 1900. Immigration to the United States, 1776-1820: a study in causes and effects. 1917. *Columbia*.
- JOSEPH M. GILLMAN, A.B., Western Reserve, 1913; A.M., Columbia, 1915. Immigration, a chapter in the Cleveland labor problem. 1917. *Columbia*.
- ROBERTA HODGSON, M.A., Wisconsin, 1911. Types and traits of the negroes of Athens, Georgia. *Wisconsin*.
- C. C. JANSEN, A.M., Taylor College, 1913; A.M., Kansas, 1914. The Americanization of the German Russian Mennonites in central Kansas. 1918. *Chicago*.
- RACHEL B. MURAVCHIK, Certificate, Gymnasium, Kief, 1903; A.M., Columbia, 1913. Modern civilization and the declining birthrate. 1917. *Columbia*.
- JAMES R. MUTCHMORE, A.B., Toronto, 1913; A.M., Columbia, 1915. Canadian immigration. 1918. *Columbia*.
- E. B. REUTER, A.B., Missouri, 1910; S.B., 1910; A.M., 1911. The mulatto; a sociological and psychological study. 1917. *Chicago*.

- JESSE F. STEINER, A.B., Heidelberg (Ohio), 1901; A.M., Harvard, 1913. The Japanese invasion, a study in racial contrasts. In press. *Chicago*.
- DONNA FAY THOMPSON, A.B., Indiana, 1913; A.M., 1914. The birth rate in college graduates' families. 1919. *Columbia*.
- J. B. VERNON, A.B., Wake Forest College, 1911. The industrial development of the whites and blacks in North Carolina since the war. 1917. *Columbia*.

Social Problems and Reforms

- MATTHEW P. ADAMS, S.B., Harvard, 1904; A.M., Columbia, 1913. A study of five groups of families whose children attend the industrial schools of the Children's Aid Society. 1917. *Columbia*.
- HUBERT EMERSON BICE, B.A., Ohio State, 1909; A.M., 1913. The unemployable. 1919. *Ohio State*.
- VERNON MOSIER CADY, B.S., California, 1908; S.T.B., Pacific School of Ministry, 1908. Social control of the feeble-minded. 1917. *Columbia*.
- CHARLES H. CHASE, B.S., Columbia, 1913. Social inefficiencies in our industrial life. 1917. *Columbia*.
- ARCHIBALD B. CLARK, A.B., Reed, 1916. The popular vote as an index of social solidarity. 1918. *Columbia*.
- EDNA HATFIELD EDMONDSON, A.B., Indiana, 1911; A.M., 1914. The associations of crime in the population of Gary, Indiana. 1917. *Indiana*.
- Z. T. EGARTNER, A.B., Cincinnati, 1914. Race prejudice in the United States of America. 1918. *Chicago*.
- FRIEDA FLIGELMAN, A.B., Wisconsin, 1910. Some aspects of toleration. 1918. *Columbia*.
- WARNER E. GETTYS, B.A., Hiram, 1913; A.M., Ohio State, 1916. Degenerate families. 1918. *Ohio State*.
- WILLARD EARL GIVENS, A.B., Indiana, 1913. The social value of the Chatauqua movement. 1919. *Columbia*.
- CARY WALKER HAYES, A.B., Washburn, 1909; A.M., Columbia, 1912. Public morals and recreation: a municipal program. 1917. *Columbia*.
- EDNA GERTRUDE HENRY, A.B., Indiana, 1897; A.M., 1914. The principles of medical social service. 1917. *Indiana*.
- GLENN R. JOHNSON, A.B., Reed, 1915. The American newspaper as an indicator of social forces. 1918. *Columbia*.
- F. W. JONES, B.S., Virginia Polytechnic Institute, 1903; A.B., Richmond, 1911; A.M., 1914. Measure of forms of political progress. 1917. *Columbia*.
- MALCOLM KEIR, B.S., Pennsylvania, 1911; A.M., 1914. Some influences of environment in Massachusetts. 1917. *Pennsylvania*.
- MARY VAN KLEECK, A.B., Smith, 1904. The fact basis for industrial reform. 1918. *Columbia*.

- PHILIP KLEIN, A.B., College of the City of New York, 1911. History and present status of the treatment of crime in the state of New York. 1918. *Columbia*.
- ANNA CHRISTINE MCBRIDE, A.B., Missouri, 1912; B.S., 1912; A.M., 1913. Phases of the standardization of conduct. 1918. *Columbia*.
- NELLIE MCKINLEY, B.A., University Washington, 1913; A.M., 1914. History of the relations of university governing boards to university teachers. *Wisconsin*.
- JANE ISABELL NEWELL, B.A., Wellesley, 1907; M.A., Wisconsin, 1908. The Women's Christian Temperance Union. *Wisconsin*.
- REBECCA OSLER, B.A., Swarthmore, 1913; M.A., Wisconsin, 1916. Means of safeguarding professional ethics. *Wisconsin*.
- HOKE SMITH O'KELLEY, A.B., N. Georgia Agricultural College, 1915; A.M., University of Georgia, 1915. Health and sanitation among negroes. 1918. *Columbia*.
- DEWITT CLINTON POND, B.S., Trinity, 1908. Tenement house laws. 1917. *Columbia*.
- O. G. REUMANN, A.B., Syracuse, 1913; A.M., Columbia, 1915. Inebriety and its treatment. 1917. *Columbia*.
- HERBERT NEWHARD SHENTON, A.B., Dickinson, 1906; A.M., 1909; B.D., Drew, 1910. The social activities of religious organizations. 1917. *Columbia*.
- RUSSELL GORDON SMITH, A.B., Richmond, 1911; A.M., Columbia, 1914. A sociological study of opinion in the United States. 1918. *Columbia*.
- JACOB NATHANIEL SOKOHL, B.S., Teachers College, 1912. Vocational guidance. 1917. *Columbia*.
- EMMA ANNIE WINSLOW, B.S., Teachers College, 1914. The use of the budget in the household as a means of securing better control of expenditures. 1917. *Columbia*.
- BENJAMIN FRANKLIN YOUNG, JR., A.B., Ohio Wesleyan, 1913. The expert in social organization. 1918. *Columbia*.

Insurance and Pensions

- JOSEPH LEWIS COHEN, A.B., Cambridge, 1913. Insurance against unemployment. 1917. *Columbia*.
- PERCY ROY HAYWARD, B.A., New Brunswick, 1909; B.D., Crozer Theological Seminary, 1911. Compensation to injured Canadian workmen. 1917. *Pennsylvania*.
- CHARLES K. KNIGHT, A.B., Ohio University, 1912; A.M., 1913. History of life insurance in the United States. 1918. *Pennsylvania*.
- VICTOR N. VALGREN, A.B., Gustavus Adolphus, 1905; A.M., Minnesota, 1909. Farmers' mutual property insurance in the United States. 1917. *Chicago*.

Pauperism and Charities

- HERBERT A. BROWN, B.S., Valparaiso, 1907; Ped. B., A.B., 1908; A.M., Columbia, 1912. A study of the population of the Westchester county almshouse. 1917. *Columbia*.
- WILLIAM T. CROSS, A.B., Missouri, 1908; A.M., 1909. Institutions of charity and correction. 1918. *Chicago*.
- PORTER R. LEE, A.B., Cornell, 1903. Public outdoor relief in the United States. 1917. *Columbia*.
- EDWARD LE GROOT LEONARD, S.T.B., St. Mary's Seminary (Baltimore), 1914. Development of relief legislation in Maryland. 1918. *Catholic University*.
- WILLIAM RADDATZ, B.A., Lawrence, 1908; M.A., Northwestern, 1912. Charitable foundations. *Wisconsin*.
- HENRY W. THURSTON, A.B., Dartmouth, 1886. The development of standards in the case of dependent children. 1917. *Columbia*.
- MARY C. TINNEY, A.B., Adelphi, 1909; A.M., Chicago, 1910. The Catholic home bureau for dependent children in New York City. 1917. *Columbia*.

Socialism and Co-operative Enterprises

- OTHO C. AULT, A.B., Tri-State, 1907; A.B., Defiance, 1911. The recent development of socialism in the United States. 1917. *Chicago*.
- GEORGE J. EBERLE, B.A., Wisconsin, 1914. The municipalization of electric railways. *Wisconsin*.
- MARK SYLVIVS HANDMAN, A.B., Oregon, 1907. Beginnings of the social philosophy of Karl Marx. 1917. *Chicago*.
- HERBERT W. ISAY, Brussels Gymnasium, Brussels University. European socialists and the war. 1918. *Columbia*.
- EARL L. STEHMAN, A.B., Franklin and Marshall, 1912. Communistic life of the Moravians at Ephrate, Pennsylvania. 1917. *Columbia*.

Statistics and Its Methods

- C. D. BLACHLY, Ph.B., Grinnell, 1908. Organization of social statistics in Chicago. 1917. *Chicago*.
- FRANK ALEXANDER ROSS, Ph.B., Yale, 1908; A.M., Columbia, 1913. A study of the application of statistical methods to sociological problems. 1917. *Columbia*.

NOTES

Since March 1, 1917, the following names have been added to the membership of the American Economic Association:

- Anderson, Gordon B., Jr., University of Pennsylvania, Philadelphia, Pa.
 Behre, Theodore S., 2723 Marengo St., New Orleans, La.
 Bleeker, Herman E., 6058 Harper Ave., Chicago, Ill.
 Bolton, T. C., University of Pennsylvania, Philadelphia, Pa.
 Brown, Frederick L., 3300 S. Racine Ave., Chicago, Ill.
 Brown, P. W., 504 Chalmers St., Champaign, Ill.
 Carothers, Neil, 35 Park Place, Princeton, N. J.
 Carpenter, R. V., Metropolitan Life Ins. Co., New York, N. Y.
 Chen, W. K., 6 Hallgarten Hall, Dartmouth College, Hanover, N. H.
 Conway, S. B., Jr., Danville Knitting Mills, Danville, Va.
 Creekpaum, C. C., 15a Conant Hall, Cambridge, Mass.
 Crosgrave, Lloyd M., University of Minnesota, Minneapolis, Minn.
 Delury, Timothy J., 435 Columbia Road, Dorchester, Mass.
 Dublin, Louis I., 1 Madison Ave., New York, N. Y.
 Dunham, A. W., Care of National City Bank, 55 Wall St., New York, N. Y.
 Dupont, Ernest E., Houma, La.
 Eiseman, Samuel, 120 East 23d St., New York, N. Y.
 Emerson, Guy, 31 Nassau St., New York, N. Y.
 Fisk, Harvey E., 62 Cedar St., New York, N. Y.
 Forney, E. H., The Belle Springs Creamery Co., Abilene, Kans.
 Frailey, P. L., 509 Stambaugh Bldg., Youngstown, O.
 Freeman, Herbert C., River View Manor, Hastings on Hudson, N. Y.
 de Garmo, Margaret F., 6186 Washington Blvd., St. Louis, Mo.
 Glancy, M. F., 3231 Gilbert Ave., Cincinnati, O.
 Graham, T. Bertrand, Metropolitan Life Ins. Co., New York, N. Y.
 Grillo, A. H., Buckeye Overall Co., Versailles, O.
 Harris, Joseph P., Citizens Savings & Trust Co., Cleveland, O.
 Hatton, Richard D., Manchester & Sulphur Aves., St. Louis, Mo.
 Hodgson, Fred T., 537 S. Dearborn St., Chicago, Ill.
 Kahn, Walter B., 37 Mellen St., Cambridge, Mass.
 Kain, Frank, Clearinghouse, California
 Kawasaki, K., Nagaimachi, Yamagataken, Japan
 Kuo, C. T., Taichowky, China
 Landers, T. E., Capital City Dairy Co., Columbus, O.
 Lau, K. C., 201 Bryant Ave., Ithaca, N. Y.
 Levy, S. Leon, 59 John St., New York, N. Y.
 Lippitt, W. D., Sugar Bldg., Denver, Colo.
 Macklin, Theodore, 114 South Eighth St., Manhattan, Kans.
 Mason, Alfred, 94 Pine St., New York, N. Y.
 Matthies, G. E., Seymour Mfg. Co., Seymour, Conn.
 Mead, Elwood, 6215 Chabot Road, Oakland, Calif.
 Miller, Fred, Central High School, St. Louis, Mo.
 Moller, Hjalmar, Lund, Sweden
 Monroe, William S., 64 East Elm St., Chicago, Ill.
 Morgan, A. H., Intermountain Institute, Weiser, Idaho
 Mueller, Henry J., Mueller-Keller Candy Co., St. Joseph, Mo.

Nissen, John J., Nissen Baking Co., Portland, Maine
Parsons, N. H., Parsons Lumber Co., Rockford, Ill.
Peters, Julius H., 701 Hazel St., Atlantic, Iowa
Potter, G. L., 21 Winthrop Hall, Cambridge, Mass.
Reed, Henry E., Court House, Portland, Oregon
Schmidt, Emil J., 2133 Fremont St., Chicago, Ill.
Schulte, August B., 5622 Germantown Ave., Philadelphia, Pa.
Stecker, Margaret L., 80 Bible House, Astor Place, New York, N. Y.
Taussig, Walter M., Grand Central Terminal, New York, N. Y.
Taylor, Amos E., Chester, Pa.
Titsworth, H. H., The Clay Products Company, Indianapolis, Ind.
Underwood, Frederick D., 50 Church St., New York, N. Y.
Wagner, John M., Houghton, Mich.
Walbridge, Henry D., 14 Wall St., New York, N. Y.
Warn, Charles E., Suite 912, S. W. Life Bldg., Dallas, Texas
Weil, Charles A., University of Pennsylvania, Philadelphia, Pa.
Weil, Edmond, 48 East St., New York, N. Y.
Wilder, Edward T., Kansas City, Mo.
Winship, Fred C., 1804 Q St., Lincoln, Nebraska
Wood, Donald M., 175 W. Jackson Blvd., Chicago, Ill.
Zehden, Martin, 132 Nassau St., New York, N. Y.

At the tenth annual meeting of the Mississippi Valley Historical Association, held at Chicago, April 26-28, 1917, W. R. Stevens, of the University of Minnesota, read a paper on "Fur trading companies in the Northwest, 1763-1816," and Theodore C. Pease of the University of Illinois, a paper on "Nauvoo, a possible study in economic determinism."

At the twenty-second annual meeting of the Michigan Academy of Science held at Ann Arbor, March 28-31, 1917, the section of economics, under the chairmanship of Professor Frank T. Carlton, considered the following program: "Railway maintenance of way expenses and cost accounting," A. Bradley, of the University of Michigan; "The future of the country church," Robert Phillips, of the University of Michigan; "Effect of the European war upon the supply of capital and the rate of interest in the United States," David Friday, of New York University; "Descriptive economics," H. C. Adams, of the University of Michigan; "Labor income scheme of farm business analysis," W. O. Hedrick, of Michigan Agricultural College; "The relation of government to economic efficiency," E. H. Ryder, Michigan Agricultural College; "Some tendencies in American municipal indebtedness," F. E. Clark, University of Michigan.

Association meetings to be held in the near future are: National Conference of Charities and Corrections, at Pittsburgh, Pa., June 6-

13 (Secretary, Mrs. G. Sharrot, 40 Court House, Minneapolis, Minn.); National Housing Association, at Chicago, October 15-17 (Secretary, Lawrence Veiller, 105 East 22d St., New York); National Association of Jewish Social Workers, at Pittsburgh, Pa., June 3-6 (Secretary, M. M. Goldstein, 356 Second Ave., New York); National Federation of Settlements, at Pittsburgh, June 2-5 (Secretary, Robert A. Woods, South End House, Boston); and National Women's Trade Union League, at Kansas City, Mo., June 4 (Secretary, Emma Steghagen, 139 North Clark St., Chicago).

The Yearbook of the Carnegie Institution of Washington, for 1916, contains the report of Professor Henry W. Farnam, chairman of the Department of Economics and Sociology. In this he discusses the difficulties under which this department has worked and its future. More recently the department has been discontinued and in its place there has been organized a voluntary association composed of collaborators who were formerly members of the Carnegie department. This new group is known as the Board of Research Associates in American Economic History and is made up of the following members: Henry W. Farnam, chairman, Victor S. Clark, John R. Commons, Davis R. Dewey, Henry B. Gardner, Emory R. Johnson, E. W. Parker, Henry C. Taylor, and Walter F. Willcox. The Carnegie Institution has turned over to this board the balance of appropriations credited on its books, and to this there has been added a private appropriation which practically doubles the fund.

The Department of Economics and Sociology of the Carnegie Institution has already published the index of the economic material in the *Documents of the States*, prepared by Miss A. R. Hasse, and which covers thirteen states. About sixty-five monographic studies have been published through various agencies, independent of the Carnegie Institution. Two histories have been published: *History of Commerce*, by Professor Emory R. Johnson; and *History of Manufactures to 1860*, by Dr. Victor Clark; the *History of the Labor Movement*, by Professor John R. Commons and his associates, will be published within a short time by the Macmillan Company; and the *History of Transportation to 1860*, prepared under the direction of B. H. Meyer, is also announced.

The American Association of Financial Statisticians was organized in New York, April 13, 1917. Professor Charles W. Gerstenberg, of New York University, was elected president.

Washington University (St. Louis) is about to establish a School of

Commerce and Finance based upon two years of prescribed preliminary work. Besides Professors W. F. Gephart, Isaac F. Lippincott, and C. E. Persons, of the present university staff, there will be added Professor George E. Putnam, of the University of Kansas, and Professor R. G. Rodkey, of the University of Michigan.

The New York University School of Accounts has announced that it will offer its department for free auditing of the books of philanthropic organizations of New York City, the work to be done by advanced students under the supervision of Professor Wildman.

The American Academy of Medicine announces two prizes, to be awarded in 1918 and 1921 respectively, for essays on the following subjects: for 1918, "The principles governing the physician's compensation in the various forms of social insurance"; and for 1921, "What effect has child labor on the growth of the body?" The prize for the 1918 essay is to be \$100 and for 1921, \$250.

The legislature of Iowa has recently appropriated \$25,000, annually, to finance child welfare research at the State University of Iowa.

The following persons have been appointed members of the federal Tariff Commission: Professor Frank W. Taussig, of Harvard University, Daniel C. Roper, David J. Lewis, William Kent, William S. Culbertson, and Edward P. Costigan.

Professor E. L. Bogart, of the University of Illinois, Professor S. S. Huebner, of the University of Pennsylvania, Professor E. D. Jones, of the University of Michigan, Hastings Lyon, and Miss A. R. Hasse will teach in the Summer School of Columbia University, July 9-August 17, 1917.

The books and statistical collection of Alexander Del Mar have been added to the library of the American Bankers Association (5 Nassau St., New York). This collection consists of several hundred books, thousands of pamphlets, manuscripts, clippings and notes, covered by an index of about 15,000 cards.

The Investment Bankers Association of America (111 West Monroe St., Chicago) has issued its *Fifth Annual Proceedings*.

Pamphlets and forms relating to trade acceptance may be obtained from the National Association of Credit Men, 41 Park Row, New York City.

The following pamphlets have been added to the Social Insurance Series published by the Social Insurance Committee of the American

Medical Association (535 North Dearborn St., Chicago): No. 5, *Social Insurance*, two lectures by I. M. Rubinow; No. 6, *Medical Organization under Health Insurance*, by Dr. Alexander Lambert; and No. 7, *Statistics of the Medical Profession*.

In the series of Columbia War Papers issued by Columbia University there are to be noted: No. 6, *Food Preparedness*, by Professors Seager and Chaddock; No. 7, *How to Finance the War*, by Professors Seligman and Haig; and No. 8, *Farmers and Speculators*, by Professor B. M. Anderson, Jr.

The Consumers' League of Cincinnati (30 Pickering Bldg.) has published several bulletins dealing with the conditions in mercantile establishments in Cincinnati: No. 1, June, 1915, *Conditions of Saleswomen in Mercantile Establishments*; No. 2, June, 1916, *A Study of Living Conditions in Rooming Houses*; No. 3, June, 1916, *Facts about Retail Stores*; and No. 4, *A Study of Restaurant Kitchens*.

Various memoranda in regard to coöperation can be obtained from the Coöperative League of America (70 Fifth Ave., New York), which publishes the *Coöperative Consumer*.

Professor Emory R. Johnson's volume on *Ocean and Inland Water Transportation* is being revised and rewritten and will appear in the fall under the title *Principles of Ocean Transportation*.

The Oxford University Press have published *Small Holdings and Allotments in Oxfordshire*, by A. W. Ashy.

Routledge & Son (London) announce *Chatham's Colonial Policy: a Study of the Fiscal and Economic Implications of the Colonial Policy of the Elder Pitt*, by Miss Kate Hotblack.

Further new books to be noted are:

Macmillan: *Economic Moralism*, by James Haldane Smith; *The Economic Annals of the Nineteenth Century*, vol. II, 1821-1830, by the late Prof. William Smart; *Workmen's Compensation*, by J. E. Rhodes; *The City Worker's World in America*, by Mary K. Simkhovitch; *Community: A Sociological Study*, by R. M. McIver.

Appleton: *An Introduction to Social Psychology*, by Charles E. Ellwood.

McGraw-Hill Book Co.: *Public Utility Rates*, by H. Barker.

Houghton Mifflin: *Inheritance Taxes*, by Hugh Bancroft; *Is Civilization a Disease?* by Stanton Coit; *Speeches and Addresses, 1915-1917*, by Henry Cabot Lodge.

The Iris Publishing Co. (London): *A History of the Chartist Movement*, by Julius West.

Holt: *Language and Nationality in Europe*, by Leon Dominian; *State Socialism Pro and Con*, by W. E. Walling and H. W. Laidler.

Harper: *Are We Capable of Self Government?* by Frank W. Noxon.

The Century Co.: *British Exploits in South America*, by W. H. Koebel.

Yale University Press: *The Constitution of Canada in its History and Practical Working*, by W. R. Riddell.

The Successful Farming Publishing Company (Des Moines, Iowa) has published a set of *Definite Data Maps*, in order to illustrate the buying power of American farmers and the methods of distribution of goods to them. General heads include: soil elements, farming area, general valuation, crop yields, farm live-stock, operation expenses, farm tenure, merchandise distribution, and farm paper circulation. The respective data are represented by the dot method on maps of the United States in a form familiar to those who have used the *Statistical Atlas* of the Bureau of the Census. They are suggestive and should be of interest to all students of the resources of the United States. Readers who are interested are advised to write to Mr. E. T. Meredith, publisher of *Successful Farming*, in order that he may make plans for the future publication of this series.

The May issue of the *American Labor Legislation Review* is devoted to a survey of "Labor law administration in New York" covering the activities of the industrial commission of that state.

Commerce (Chicago), in the April number, has begun the preparation of a monthly digest of the decisions, rulings, and dismissals by the Interstate Commerce Commission including a monthly resumé of the administrative proceedings of the commission.

The April issue of the *Western Reserve University Bulletin* contains a paper on "Woman's economic service in time of war," by C. C. Arbuthnot.

Appointments and Resignations

Mr. William A. Barber has been promoted from instructor in accounting to assistant professor in methods of commercial education at New York University School of Commerce, Accounts and Finance.

Mr. Nathaniel W. Barnes has been appointed assistant professor of commercial organization in the School of Commerce and Administration of the University of Chicago.

Dr. R. H. Blanchard has been appointed instructor in economics and insurance at Columbia University.

Dr. Alexander E. Cance, of the Massachusetts Agricultural College, has been granted leave of absence from April 1 to January 1, 1918. He expects to devote a part of the time to writing and visiting marketing and coöperative organizations throughout the country; but for the present is working with the state committee on food supply.

Mr. J. B. Canning has been appointed assistant professor of political economy at Stanford University.

Dr. C. H. Crennan has been promoted to assistant professor of economics at the University of Pennsylvania.

Dr. Ira B. Cross has been promoted from assistant professor to associate professor of economics at the University of California.

Professor Stuart Daggett has been promoted from associate professor to professor of transportation at the University of California.

Mr. O. K. Davis is now secretary of the National Foreign Trade Council, succeeding Mr. Robert H. Patchin who resigned the position.

Professor F. H. Dixon, of Dartmouth College, is chairman of the committee which is making an industrial survey of the state of New Hampshire.

Dr. C. S. Duncan has been appointed assistant professor of commercial organization in the School of Commerce and Administration of the University of Chicago.

Mr. J. Anderson Fitzgerald resigned his position as instructor in commercial practice and statistics at the Carnegie Institute of Technology to accept appointment in the recently organized College of Commerce at Toledo University as assistant professor of commerce.

Mr. Major B. Foster has been promoted from instructor in finance to assistant professor in economics at New York University School of Commerce, Accounts and Finance.

Mr. George E. Frazer has been appointed professorial lecturer in business organization in the School of Commerce and Administration of the University of Chicago.

Professor Ralph E. George, of Whitman College, has been granted another year's leave of absence and will devote the time to special investigations for private interests.

Professor Charles W. Gerstenberg, of New York University School

of Commerce, Accounts and Finance is promoted from assistant professor to professor of finance.

Mr. Clair E. Griffin, now instructor in political economy in Dartmouth College, will next year be instructor in transportation at Johns Hopkins University.

Mr. P. M. Heiges is to be instructor in methods in commercial education at New York University School of Commerce, Accounts and Finance.

Mr. Homer Hoyt has been appointed instructor in political economy at Beloit College.

Mr. T. L. Kibler resigned his position with the division of the Department of Justice for the enforcement of acts to regulate commerce in order to accept the position as dean of the College of Commerce at Toledo University.

Mr. Edward J. Kilduff has been promoted from instructor to assistant professor of business English at New York University School of Commerce, Accounts and Finance.

Dr. Frank H. Knight has been appointed instructor in political economy at the University of Chicago.

Mr. F. R. Leach has been appointed lecturer on municipal accounting at New York University School of Commerce, Accounts and Finance.

Mr. Lars P. Meyer has been appointed instructor in finance at New York University School of Commerce and Finance.

Dr. Bruce D. Mudgett has been elected assistant professor of insurance in the University of Washington, Seattle.

Professor H. S. Person, of the Tuck School, Dartmouth College, is a member of the executive committee of the New Hampshire Committee on Public Safety.

Mr. Nathan Reass has been made instructor in accounting at New York University School of Commerce, Accounts and Finance.

Mr. B. C. Reece has been appointed instructor in economics at New York University School of Commerce, Accounts and Finance.

Dr. Charles Reitell is to become professor of commerce at Lawrence College, Appleton, Wisconsin.

Dr. Robert Riegel has been promoted to assistant professor of insurance in the University of Pennsylvania.

Dr. I. M. Rubinow will deliver a course of lectures on social insurance in the Summer School of Pittsburgh University during the week of July 9, 1917.

Mr. L. E. Simpson has been appointed instructor in finance at New York University School of Commerce, Accounts and Finance.

Mr. H. P. Shuit has been appointed lecturer on cost accounting at New York University School of Commerce, Accounts and Finance.

Dr. W. W. Swanson, of Queen's University, has succeeded Dr. Gray as professor and head of the department of political economy at the University of Saskatchewan.

Dr. Leo Wolman, instructor in political economy at the University of Michigan, will next year go to Johns Hopkins University as assistant in insurance.

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THE RESERVES SITUATION IN THE FEDERAL RESERVE SYSTEM

We are passing from a debtor to a creditor nation; we have come to hold a disproportionate share of the world's gold; our provincial finance is being transformed into a cosmopolitan finance; banking and financial problems, of huge proportions and in new spheres, are pressing for immediate solution. Luckily the reconstruction of our banking mechanism was well under way when Mars let loose his dogs of war in 1914; we had taken measures to supplant our rigid, restricted, decentralized national bank system with an elastic, freer, centralized federal reserve system. Among the chief elements of strength in a banking system are its reserves and the mechanism by which they are controlled. Size, mobility, and composition are the three factors of strength in bank reserves; they make for safety, elasticity, and accommodation. The federal reserve scheme changed the size, quality, location, and control of our bank reserves; it purposed to make them a more effective defense against panic and a more serviceable agent for accommodation to the business world; the primary reserves were to be rendered so mobile and consolidated and the secondary reserves so convertible that the size of the primary reserves might actually be reduced and yet provide greater safety, elasticity, and accommodation than were realized under our old banking scheme. It will be the aim of this article to present these changes and to note wherein expectations have or have not been fulfilled and how the original plan has been amended.

Reserves against Deposits

Secondary reserves: (1) *of the federal reserve banks.* Since the member banks are stockholders of the federal reserve banks they have the same interest in dividends as do stockholders in an ordinary bank. The Federal Reserve act provides that member banks as stockholders are entitled to receive an annual 6 per cent cumulative dividend on their stock. Up to 1916 the twelve federal reserve banks earned a net half million dollars and during 1916 two

and three quarter millions. The sum of these does not provide the 6 per cent; in fact, the figures for the whole system average about 3 per cent for the two years and 5 per cent for last year, on the yearly average paid-in capital of \$55 millions. By the first of the year all the banks had declared dividends; when declared they are at 6 per cent and postdated to cover accumulated arrears between certain dates. Richmond has hers paid till October, 1916; Atlanta, till June, 1916; Dallas, till April, 1916; but New York, St. Louis, and San Francisco have not yet cleared their 1915 arrears. During 1916 three banks earned more than 6 per cent, eight more than 5 per cent, and ten more than 4 per cent. The system has, therefore, to date, in the light of the money market, been a net burden on the member banks.

Some persons believe this burden will be perennial, some are confident the federal reserve banks will ultimately pay their way. Let them become well established and get their organization expenses amortized; let them become better known and much used by member banks for rediscounting; let them develop their open-market transactions, particularly in acceptances; let them be freed from the handicaps created by war conditions—and it is expected they can earn their 6 per cent dividend and be self-sustaining. They are expensive institutions, but not too expensive for the service they render. It is, of course, wrong in principle to judge the usefulness of the federal reserve banks by their earning capacity. They are dominated by a public interest, not a profit-making interest; the public interest may necessitate that they enter into transactions which will result in little if any profit.

Nevertheless, the fact of these low earnings has had a most telling effect on the attitude of the national and state banks toward the system, and has, together with other matters relating more directly to bank reserves, occasioned the chief movements for changing the system by legislation and board regulation. One of these movements is to reduce or abolish the capitalization of the federal reserve banks. The argument, occasioned as it was by the low earnings of the capital stock, was that the choice of 6 per cent subscriptions was arbitrary and a guess at what the capital requirements would be, and that the mere liability of the banks for the required capital would have been as effective as its payment; that the paid-in capital created a dividend responsibility which forced banking operations and earnings, *i.e.*, forced the reserve banks into competition with the member owners, in open-market

operations; and that the gold reserves paid into the reserve banks would be ample to take care of the rediscounting needs; and, finally, that these subscription requirements discouraged state banks from entering. Efforts to obtain legislative relief from Congress have failed; such relief was opposed by the Federal Reserve Board and by a majority of the Advisory Council. The capitalization serves many useful ends; it provided an initial working capital; it gives the members a decided interest in the reserve bank other than mere depository; it provides resources sufficient to insure stability and continuity for the reserve bank; and it furthers (or, as alleged, necessitates) more extensive open-market operations, which are the instruments by which the board and reserve banks will, it is hoped, master the banking situation.

By open-market operations the federal reserve banks will, when the system is developed, control the money market. It is their means of making the market rate conform to the rediscount rate set by themselves and the board. By becoming an active factor in the market, buying and selling at the established rates, they can make the rediscount rate effective in the market; otherwise, whether it would be effective or not would depend wholly on the extent to which member banks chose to rediscount. By this means the reserve banks will be enabled to maintain a reasonable and stable interest rate.

But this power of control is possible only if the reserve banks have a substantial amount of loan funds at their disposal and if the open-market purchases are commercial papers and if a really broad discount market exists. The recent growth in banker's acceptances both existing in the market and bought by the federal reserve banks indicates that these banks are beginning to assume somewhat the place which the Bank of England fills in the English discount market. The board's policy is to suggest to the federal reserve banks a substantial reduction of their earning assets when money is easy, thus absorbing much of the idle funds on the market; for instance, in order to absorb part of the great gold imports during the latter part of January and early February, purchases of acceptances fell off and United States bonds were sold, raising the reserves \$33 millions; and in anticipation of the declaration of war the earning assets were reduced from \$222 millions at the beginning of the year to \$167 millions at the outbreak of the war. The reserve situation was therefore so exceptionally strong as to stifle all uneasiness. On the other hand, if money

tightens, as it did the first week of last December, besides the increase of rediscounts to \$38 millions on December 7, the earning assets were increased by open-market purchases, thus releasing federal reserve notes and the legal tender funds of the central banks and easing rates. Now if the volume of commercial bills on the open market can be increased to some amount comparable with the volume on the English discount market and the loanable funds of the federal reserve banks can be increased *pari passu*, it will be altogether possible for the federal reserve system to control the international gold flow and defend our financial system in times of peace against wide fluctuations in money market rates and in the wake of the war against too sudden and great efflux of gold.

The advisability of having a paid-in capital stock for the federal reserve banks and of thus creating a dividend responsibility has been shown open to dispute, and, later in this article,¹ it will be shown inadvisable for the federal reserve banks to pay interest on balances carried for member banks according to reserve requirements. To create such an interest obligation would necessitate that the federal reserve bank invest too large a proportion of its assets, including these reserves, in securities which are characterized by their good earning power rather than by safety and convertibility in times of emergency. It is the established custom among European central banks to pay no interest on deposits. Reserve banks must maintain their reserves in gold or in self-liquidating short-term commercial instruments or in securities readily convertible without sacrificing values even in times of panic. Call loans, too, were eliminated by the very theory and purpose of the Federal Reserve act. The range of investments for the reserve banks is thus very limited; practically all their earning assets must be quick assets and act as secondary reserve. Yet under the banking scheme the investment of some funds is necessary to pay running expenses and dividends on capital stock; but the element of liquidity must ever be transcendent in this secondary reserve.

The total earning assets of the twelve reserve banks have averaged for the first four months of 1917 \$202.7 millions, which is 22 per cent of the average total resources. Of these total earning assets an average of 61 per cent has been composed of commercial paper of the highest quality, namely, rediscounts for members and acceptances bought in open market. The municipal warrants and treasury notes, as well as the certificates of indebtedness issued in

¹ See page 519.

anticipation of Liberty Loan subscriptions, also have early maturities, and the bonds held are United States bonds for which the market is generally good. It is therefore apparent that nearly all of the assets of these central banks are carried in legal tender state, or in the most liquid forms of investment known, and as secondary reserves conform to the accepted standard and ideal for central banks.

But the earning power of such investments is low. Calculating the earnings to an annual rate it appears that rediscounts are the most profitable form of investment and municipal warrants second, and the average rate of earnings is about 3 per cent. The government bonds pay but 2 or 3 per cent; the acceptances constitute a large fraction of the investments and the rate of discount on these is very low because they are bought in open market in competition with other banks all of which are suffering from a plethora of gold; and the volume of rediscounts is very small, owing to several reasons but chiefly to the abundance of money everywhere at extremely easy rates.

Secondary reserves: (2) of the member banks. By reason of the wide variety of investments of the member banks and the want of strict standardization in these investments it is quite impossible to determine, considering the system as a whole, the quality and amount of their secondary reserves. A few pertinent matters may, however, be presented. One of these is the relative increases of the various resources. On June 30, 1916, the national and all other banks reporting to the Comptroller owned \$6,057 millions of long-term securities exclusive of their \$760 millions of United States government bonds. From June, 1914, to June, 1916, the aggregate capital and surplus of all the banks increased 5.1 per cent, while their investments in stocks and bonds other than United States bonds increased 27.2 per cent. Compare the figures as given for the March and May calls of 1916 and 1917:

	March 3, 1916	March 5, 1917
U. S. bonds (000,000) . . .	\$753	\$ 714
Other bonds	1,465	1,770 (27.6 per cent) increase
Total resources	13,839	15,979 (15.5 " ") "
	May 1, 1916	May 1, 1917
U. S. bonds (000,000) . . .	\$739	\$768
Other bonds	1,526	1,857 (21.7 per cent) increase
Total resources	11,127	13,075 (17.5 " ") "

It is seen that for the national banks during the past year the fraction of total resources composed of long-term securities has increased remarkably. The banks are converting a larger per cent of their cash into bonds, commercial banking is yielding to investment banking, the commercial loan fund is drifting to the finance market. War finance is likely to accelerate this drift. But it is a tendency fraught with danger; and the board, the council, and the American Bankers' Association have all issued counsels of moderation in such purchases.² The board believes that "whenever the absorbing power of the investment market shows signs of exhaustion it would be better that the volume of our exports be reduced, or that trade balances in our favor be settled by imports of gold, than that our banks, especially those of moderate size, should unduly extend their investments in foreign securities at a time when business prudence and conservation suggest the necessity of their maintaining themselves in a particularly strong position."³ "Strong position" comes by high liquidity of assets and our repeated experiences with the securities market as a place for instant liquefaction of assets in panic times are warning enough. The cause of this accelerated growth of long-term investments is that deposits have increased faster than loans and bankers have been hard pressed to find openings for their funds in commercial lines.

As yet the liquidity of bank reserves in general has not been greatly increased by bank and trade acceptances; their volume is small and a considerable fraction of them are renewal acceptances.

Primary reserves. The attempt to obviate subscriptions to the

² On June 13, 1917, the Comptroller expressed the opinion that the national banks "could reasonably and conservatively" subscribe on their own account at least 6 per cent of their total resources to the Liberty Loan.

³ One particular instance of the guardianship which the board exercises over the composition of their secondary reserves occurred in November when the board issued through the press a mild and somewhat cryptic statement suggesting caution and moderation in the purchase, by the banks of the federal reserve system, of British Treasury bills, which, "being open for a long period of renewals, lose their character as essentially self-liquidating transactions of short maturity." It was a caution not to accept too freely paper which they will find necessary to extend by successive renewals and eventually convert into a long time investment. In November it was a practical certainty that any such volume of Treasury notes as was proposed to be placed in our banks could not be taken up at their maturity or even after repeated renewals and that the foreign borrowers were assimilating our commercial banking resources and our investment resources.

capital stock of the federal reserve banks was part and parcel of other attempts to escape the redistribution of reserves, as required by the act. The following table gives the reserve requirements under the National Bank act and the Federal Reserve act and amendments, and the allocation of the reserves as between the vaults of the bank itself and those of the reserve banks.

DISTRIBUTION OF RESERVES OF MEMBER BANKS

	Central reserve banks	Reserve city banks	Country banks
(a) Under the National Bank act:			
Total <i>vs.</i> demand deposits .	25 per cent	25 per cent	15 per cent
In its own vaults	all	1/2	6/15
In approved reserve banks (permissive) . . . . .	. . . . .	1/2	9/15
(b) Under Federal Reserve act until amendment Sep- tember 7, 1916:			
Total <i>vs.</i> demand deposits .	18 per cent	15 per cent	12 per cent
Total <i>vs.</i> time deposits . .	5 per cent	5 per cent	5 per cent
In its own vaults	6/18	5/15 (6/15)	4/12 (5/12)
In federal reserve banks .	7/18	6/15 (3/15 + 1/15)	5/12 (2/12 + 1/12)
In either	5/18	4/15 ¹	3/12 ¹
(c) Under amendment of Sep- tember 7, 1916:			
Total <i>vs.</i> demand deposits .	18 per cent	15 per cent	12 per cent
Total <i>vs.</i> time deposits . .	5 per cent	5 per cent	5 per cent
In federal reserve banks .	7/18	6/15	5/12
In either	11/18	9/15	7/12
(d) Under amendment of June 21, 1917:			
Total <i>vs.</i> demand deposits .	13 per cent	10 per cent	7 per cent
Total <i>vs.</i> time deposits . .	3 per cent	3 per cent	3 per cent
In federal reserve banks .	13 per cent	10 per cent	7 per cent

¹ During first three years some may be carried in national banks in reserve cities and central reserve cities.

It will be noted that the federal reserve plan was: (1) to substitute the federal reserve banks for central reserve city and reserve city banks as reserves depositories, which substitution was to be effected by three semi-annual payments; (2) to reduce the reserve requirements against *demand* liabilities and, very much more so, the reserves against *time* deposits, for the first time particularized. The board early became ambitious to concentrate

the gold holdings of the member banks into the federal reserve banks, and Congress following its recommendation, in September, 1916, amended the act of 1914 so as to permit the members to transfer to the federal reserve banks that part of their reserve formerly required to be kept in their own vaults. But the member banks failed to respond to this permission, though solicited earnestly by the federal reserve banks. The board, accordingly, decided to compel the transfer by legislative enactment, secured June 21, 1917, which prescribes only the per cent to be held with the federal reserve bank and lets the member keep what till money it finds expedient. The bills proposed by the board, the council, the House committee, and the Senate committee, though differing slightly in details, agreed in the two ideas of reducing the percentage of reserve and in concentrating the reserves in the federal reserve banks. The new banking system shows, therefore, two very obvious movements—the reduction and the concentration of reserves.

The argument for concentration of reserves is that their efficiency would be increased. The total reserve may remain practically unchanged, but when pooled in twelve banks rather than scattered among 7,500 banks it partakes of the quality of a safety fund or insurance; in the federal reserve vaults it is sure to be liquid and “can be effectively protected when not required and effectively used when needed.”

The effectiveness of the system depends upon universal confidence in its ability to meet any possible situation and such confidence is best inspired by reserves so large as to put away all speculation about it. During the war, big exports have surcharged our financial institutions with a disproportionate part of the world's gold, and many are justly apprehensive lest at the conclusion of the war this will have to be given up in great part. As will appear later in this article in the discussion of federal reserve notes, such demands would bear less heavily upon our credit system if the reserves were surrendered through the federal reserve banks rather than the member banks. The reserves ought therefore to be built up to such size as to meet any possible export demand without shaking the structure and inciting domestic demand. Since the federal reserve banks have supplanted the banks of the New York clearing house as the guardians of our finances, irreparable damage would result to the federal reserve system should it fail to meet the export situation; particularly should the gold reserves of the

federal reserve banks of New York and San Francisco be large, for the drain would be heaviest from these great shipping ports. In the light of the immense imports of gold since the war opened and of the gold produced within our domains, the reserves held in the federal reserve banks make it evident that so far the system has lacked "adequate powers to attract and conserve the gold reserves of the country." The June amendment will improve the situation by forcing a transfer of about \$400 millions from local to central bank vaults.

The member banks have not generally approved the proposal to further concentrate reserves. In part this reluctance is pure sentiment, a hesitancy to part with gold which has gathered the dust of decades in their vaults. But in part this reluctance is upon a reasoned basis. It is argued that the larger the proportion of the member reserves carried with the federal reserve banks the greater is the amount that the reserve banks can use in competing with the member banks in the open-market; and that these concentrated reserves may vanish through re-use by the federal reserve bank, whereas if they are kept in the members' vaults they are intact, cannot be juggled with nor diminished; that if used by the federal reserve bank as the basis of note issue they may inflate the currency two and a half times their amount, or if used to purchase items on the open market they may get back into bank vaults and become the basis of further deposit currency.

In the call of November 17, the Comptroller revised his method of reporting reserves; the items "reserve in vault" and "reserve in federal reserve banks," which had formerly been reported separately, were combined in one item. It was felt that since the adoption of the *ruling* making it optional with members to keep reserves in vault or in federal reserve bank, "these items might properly be consolidated, just as similar figures are combined in English bank statements, and that such consolidation would be a final recognition—that deposits with the federal reserve bank are practically interchangeable (so far as reserve availability is concerned) with cash in vault."

One other and very important amendment was proposed by the board relative to the control and concentration of reserves, viz.:

To meet extraordinary conditions, probably such as threatened financial panics resulting from a declaration of war or the cessation of hostilities in Europe—the Board may upon an affirmative vote of five of its members require member banks to increase the balances which

they must keep on deposit with their Reserve banks; these increased balances can be required, however, for a period of but thirty days. This increase shall at no time be more than one-fifth and at the same rate for all banks of any one district, and the Board is to report to Congress the conditions on which such action is based.

The board argued that this provision would enable it in prolonged periods of extreme ease in money markets to check any tendency toward excessive loans or undue extensions of credit. In considering this proposal it is to be remembered that in cases of emergency the board has, by the terms of the Federal Reserve act, power to suspend for thirty days and to renew such suspension for periods of fifteen days, all reserve requirements of the act. This new proposal is therefore based on the same principle, namely, that banking is better regulated by judgment of a body of experts than by law. The presumption is at all times against statutory regulation of matters of business discretion; it is strengthened just now by the utter impossibility of forecasting what conditions will arise during the present troublous times and of making adequate provision by law for contingencies. And the ill-effects of "letting such matters be controlled by thousands of banks acting each for itself and none with any duty regarding national or international affairs" are too well known. The world's best banking systems are least regulated by law with respect to reserves. Our new system can attain its maximum efficiency only by allowing to the governing board "as broad discretion as prudently can be granted" in using the tools of the system, of which the gold reserves are prime. Power to increase the required reserves would not be as dangerous as the power to lower reserves, which power the board already has.

But this amendment failed of adoption. The House committee by close vote rejected the proposal. The council advised that it would be undesirable and unnecessary to grant such powers to the board; it argued that "the effect would be that member banks would be compelled to increase their non-interest bearing balances with the federal reserve banks, while non-member banks would have the free use of their funds. It would place another stumbling block in the way of State banks joining the system." It would "cause considerable disturbance and apprehension on the part of bankers who had regulated their business according to prescribed standards of reserve, if they suddenly had to curtail their operations on a word" from the board. Many express the opinion that the concentration of power in the hands of this limited body of men has

already approached the bounds of safety and this further grant would introduce unwarranted "officiousness and arbitrary action." The question appears, therefore, to turn upon the principle of government regulation of banking operations, and though the banks acquiesce in the principle to the degree of permitting the board to lower the reserve requirements they are unwilling to allow the board to raise the reserve requirements.

But the main contention of the country banks against the federal reserve system has been the loss of interest on their reserve balance. Provision was made in the Federal Reserve act for the transfer of reserves formerly kept with the reserve city and central reserve city banks to the federal reserve banks. This transfer was provided for by three semi-annual payments. Until November 16, 1917, a decreasing fraction of the reserves might be held in the correspondent banks. By amendment of June 21, 1917, this permission was withdrawn and thereafter all reserves have been carried in their own or the federal reserve banks' vaults.

The evils of our former system of redeposited reserves are too well known to be dwelt upon. It rested upon the theory "that, inasmuch as a balance with another bank was presumably payable on demand, it was equivalent to cash in the vaults of the creditor bank, and should therefore be classified as 'reserves.'" This principle was tenable only so long as these reserves were used merely for providing exchange and the funds were held there in fluid shape. But when the central banks began to compete for these balances and offered interest to attract them, it became necessary to invest these funds, and they developed the call loan for use in the speculative exchanges. This resulted in high values and wild speculation in times of emergency, and in shrinking values and depression in times of tight money; the sacrifice of security values to recover reserve balances wrought bankruptcy and panic and suspension of specie payments.

Mr. Glass, in his report on the Federal Reserve bill, defined its purpose to be "to readjust reserve requirements in such a way as to make them conform to the dictates of scientific banking" with the following "main objects":

1. To abolish entirely the present system of redeposited or pyramided reserves.
2. To establish a moderate required reserve actually to be held in cash in the vaults of the bank.

3. To prescribe a secondary reserve to take the form of a credit with the federal reserve banks.

It has just been shown that this second object has, by amendments, been given up and the real (or whole) reserve of the member banks is to be its credit with the federal reserve bank. This brings out how fundamental is the change now working in the conception of the federal reserve system. It has also been shown how, by the shifts in reserve requirements, counting balances with correspondents as reserves has now become a thing of the past. Both features concentrate a tremendous responsibility upon the federal reserve bank, and the sufficiency and liquidity of its primary and secondary reserves are the palladium of our financial system. The reserves must be kept in gold or in the forms of securities which have the very highest degree of convertibility. Call loans with securities as collateral have proven disastrous. The federal reserve bank must seek investments from the point of view of convertibility and safety and not be forced to care much about their earnings capacity. The success of the whole system therefore depends on their freedom from obligation to pay interest on reserve balances. In the Federal Reserve act there is no express provision prohibiting the federal reserve banks from paying interest on balances, but the evident intent of the act and the necessities of its successful operation require such prohibition in practice.

But this loss of interest has been a serious irritant against the federal reserve system. It has provoked movements for the reduction of reserves, for the permission to continue to count balances with correspondents as reserves, and for relief from the final payment of reserves to the federal reserve banks. The banks get large, if not ample, compensation for this loss of interest by way of increased loaning power on the basis of the reduced reserves required, but, since this gain is less easily allocated and since banks have found it difficult recently to increase their loans as fast as their deposits and take advantage of the lower reserves, they feel the loss of interest.

This reserves question is inextricably interrelated with the new "par collections" system. It is impossible in the compass of this article to give the history of this very important part of our new banking plan or an adequate exposition of the mechanism and its operation. Carrying out a permission granted by the Federal Reserve act, the board, after experimenting unsatisfactorily with

a "voluntary reciprocal" collections scheme, set up a universal mandatory par collections plan July 15, 1916.⁴

This requires each federal reserve bank to receive for collection and credit at par from its member banks checks and drafts drawn upon all members of the federal reserve system; and, also, on all non-members when such checks and drafts can be collected by the federal reserve banks, through members or otherwise, at par. Lists of such non-members whose items can be collected at par are published. Immediate credit entry upon receipt subject to final payment is given for all such items upon the books of the federal reserve bank at full face value, but the proceeds are not counted as reserve nor become available to meet checks drawn until actually collected. Checks received by a federal reserve bank on its member banks are forwarded direct to such member banks, and are not charged to their accounts until advice of payment has been received or until sufficient time has elapsed within which to receive advice of payment. In order to enable member banks to know how soon checks sent in for collection will be available either as reserves or for payment of checks drawn against them, time schedules giving the minimum time for collection are furnished by each federal reserve bank to its members. Where a member bank does not have sufficient volume of items to offset at the federal reserve bank items sent to such member by the federal reserve bank, such member may ship lawful money or federal reserve notes in payment, at the expense of the federal reserve bank. And the board has fixed a penalty to be imposed upon member banks for encroaching upon their reserves. The cost of clearing and collecting checks and drafts is assessed by the federal reserve bank against the bank depositing such items with it. This cost is known as a "service charge," and is so much per item.

Attention is called to the point as to wherein the plan is compulsory and wherein it is not. The member banks must comply with the statutory requirements about reserves; they are required to pay without deduction checks drawn upon themselves and presented for payment over their counter or by mail from the federal reserve bank and must settle with the federal reserve bank either by acceptable checks upon other banks or by the remittance of lawful money or federal reserve notes at the expense of the

⁴ By the Hardwick amendment June 21, 1917, "*par* collections" becomes somewhat a misnomer, since members are now permitted to charge up to 1/10 per cent for exchange under certain conditions.

federal reserve bank. It is not compelled to give up its former correspondents and may continue to send its checks to them for collection rather than to the federal reserve bank and it will for a time at least continue to receive from its old correspondents checks against itself for similar purpose. It may carry balances with such correspondents as before and receive interest on such balances. But such balances have not, since the amendment of June 21, 1917, been counted as reserves. And the member banks will not have funds sufficient to carry (1) their reserve requirements with their federal reserve bank and a surplus fund also with this bank to cover the exchange balances and insure themselves against penalties for cutting into their reserves, and (2) balances with their correspondents sufficient to warrant the correspondent to perform the wonted services and pay the usual 2 per cent interest. If the member bank continues to carry the former size balances with its correspondents it must ask and is justly entitled to a higher interest rate than 2 per cent, or some additional services, since the former collection services are for the most part no longer performed by the correspondents. The alternative is to seek liquid investments themselves for their surplus funds, or to carry them locally. That these alternatives are being used appears, among other indications, (1) from the accelerated growth of long-term investments by the member banks and (2) from the relative decline of reserves held by central reserve and reserve city banks and from the relative increase in the reserves held by the country banks.⁵

Among the amendments proposed by the board last January and enacted June 21 was one to permit non-member state banks and trust companies, even though too small to be eligible to membership in the federal reserve system, to avail themselves of the clearing and collection facilities of the system, provided they cover at par checks on themselves sent for collection by the federal reserve banks, and provided also that they keep a compensating balance with the federal reserve bank of their district in an

⁵ According to the Comptroller the reserves were as follows (per cent):

	Nov. 15, 1915	Nov. 17, 1916	March 5, 1917	May 1, 1917
In central reserve city banks	24.66	20.50	21.31	20.47
In reserve city banks . . .	27.39	24.88	24.48	22.84
In country banks	24.96	27.62	24.36	27.29

amount to be determined under rules prescribed by the board and sufficient to offset items in transit held for their account. Such holdings are to be solely for the purpose of exchange and collections. In proportion as a clearing and collection plan becomes so comprehensive as to provide for all checks does it become effective and useful; the par list has been steadily increasing both by voluntary action of the banks and by pressure from the federal reserve banks; as soon as the plan becomes universal so as to include all state as well as the national banks, and all forms of collection items, the necessity for maintaining accounts with correspondents for collection purposes, in addition to those with the federal reserve banks, will cease.

The second way in which "par collections" affect the reserves situation is that it reduces the "float." The old collections system was that a country bank when it dispatched a check by mail to its reserve city correspondent for collection received in most cases immediate credit. Commonly the checks were not sent by the correspondent directly to the drawee banks, some other route, often very roundabout, being selected to avoid collection charges. Hence, though the checks were not collected for days or weeks, the remitting bank received credit at once and this credit constituted a part of the reserve which it was required to keep either in its own vaults or those of its reserve city correspondents. The total sum of such checks in the mails at any one time varied between \$300 and \$500 millions. This was known as the "float."

This custom of considering both cash and uncollected checks, indiscriminately, as bank reserves was dangerous, misleading, unscientific; and to remedy it has been a most difficult task, since it affected most intimately the daily practices of every bank in the country. It really constituted a continuous impairment of reserves and a continuous overdraft on its account. It would have been positively foolish for the federal reserve banks to carry the burden of this "float." The 27,000 banks which have been carrying it have combined resources of about \$27 billions; whereas the aggregate resources of the twelve federal reserve banks are about half a billion.⁶ The float was substantially equal to their resources; that is, "their reserves would be constantly afloat in the mails instead of in their vaults and their value as reserve agents completely nullified."

In the adoption of the mandatory system in July, 1916, immedi-

⁶ Comptroller's report, 1916.

iate credit was given up and deferred credit substituted; now tentative credit only is given by federal reserve banks to their respective members, but the proceeds are not available for use either as reserves or otherwise until the funds are actually collected. Immediate credit is given only on checks against banks in the federal reserve city; checks on other federal reserve banks and on members of other federal reserve banks are credited only after one, two, four, and eight days, depending on the zones determined by average time it takes mail to reach the drawee bank. The checks are routed directly now, and this also cuts down the float. This abrogation of the practice of counting items in transit as reserve changes radically the quality of the reserves and thereby substantially increases them, *i.e.*, by the size of the reduction in the "float."⁷

Reserves against Notes

Under the federal reserve system there are three forms of notes issued. The old national bank notes are continued in circulation with the same securities and redemption fund as before 1914. The federal reserve banks are permitted, or under certain conditions compelled, to purchase a limited amount of the United States bonds securing the national bank notes and to substitute for these notes their own "federal reserve bank notes," as they are called. The total issue of these up to December 31, 1916, was \$12 millions; \$6 millions are now held by the federal reserve bank of Kansas City,⁸ and \$2 millions by the federal reserve bank of Dallas. The remaining \$4 millions are in circulation or in the Treasury of the United States, but these banks have extinguished their liability on these \$4 millions by the deposit of lawful money. So there is no addition to the circulation of the country through the issue of federal reserve bank notes.

The third form is the federal reserve note. This was introduced into our banking system to provide an elastic note issue, an issue which would increase and decrease with the local seasonal demands

⁷ Statement of the statistics of the primary reserves held by the state, national, and federal reserve banks is omitted from this paper. The reader is referred to the press reports of the Comptroller after each call or his more extended subsequent reports and to the weekly or monthly summaries in the financial sections of our dailies or financial journals. The limits of space for this article prevent a statement and discussion of the migration of reserves and the volume of surplus reserves and their location.

⁸ Some few of these notes were issued in June, 1917, by this bank, apparently in connection with the flotation of the Liberty Loan.

for money. Elasticity was to be gotten by basing the issue and security of these notes upon commercial paper. Paper meeting strict definition and discounted by a member bank could be rediscounted with the federal reserve bank, the member bank receiving federal reserve notes. The federal reserve bank, in turn, procured these from the Federal Reserve Board, by pledging these rediscounts as collateral with the federal reserve agent, and by providing in its own vaults a gold reserve of 35 per cent and a gold redemption fund of 5 per cent with the United States Treasury.

The Federal reserve agent cannot issue these notes to the Federal reserve bank except in response to the presentation of rediscounted bills as collateral. But the notes once in the hands of the bank can be issued to its members as proceeds of a rediscount of paper, or in exchange for gold, or gold certificates, or it may issue them to any person, corporation, bank or concern that has gold, coin or certificates, and wishes to exchange for federal reserve notes.

In this way the volume of notes would expand in proportion to business needs and when the commercial paper matured it would be taken up by the presentation notes or gold, thus reducing the volume of currency when business needs fell off.

But this process of issue and of the redemption of the paper has resulted in a most peculiar situation. The paper has been redeemed in part by the deposit of federal reserve notes and the trustee holding the collateral has been correspondingly cancelled. But a much bigger portion of the paper has been redeemed by deposit of gold coin and certificates, and the federal reserve notes have stayed out in circulation; meanwhile the agent's liability has continued and a large fund of gold has accumulated in his hands. By the weekly statement, of June 15, 1917, for instance, there were issued to the federal reserve banks \$528 millions of these notes, of which \$491 millions were in circulation; against these \$528 millions the federal reserve agent held as collateral only \$69 millions of rediscounted commercial paper and for the rest gold coin and certificates.

Several features of this situation are noteworthy. (1) The volume of federal reserve notes is relatively large and constant:⁹ the notes stay out in circulation when issued; the volume of the notes *per se* does not expand and contract in conformity with business needs but the aggregate volume of currency does. (2)

⁹ Below is given the volume of federal reserve notes issued to the federal reserve banks by the federal reserve agent as reported weekly the forepart of

The federal reserve notes are tending to supplant the gold certificates as common circulating medium; the gold certificates are drifting into the hands of the federal reserve agents and federal reserve notes circulate in their stead. Also, since the federal reserve notes cannot by law be used as reserves in the member banks (but gold certificates may), the gold certificates are also drifting into the reserves of the member and federal reserve banks, and their place in the currency is filled by federal reserve notes; on the other hand, since federal reserve notes may be used in state bank reserves, the state banks may be giving up gold certificates and substituting federal reserve notes. (3) The gold cover of these notes is very high, ranging as high as 90 per cent.¹⁰

This impounding of gold in the hands of the federal reserve agents has occasioned both approval and criticism. The process has resulted in a slight increase of the currency, *e.g.*, \$69 millions on June 15. On the other hand, it has extracted from circulation \$460 millions of gold which might have entered into bank reserves and become the basis of deposit expansion; but since the federal reserve notes are legal reserve in the banks and trust companies of some states and since they have to some extent, despite the laws, found their way into the reserves of national banks, they may fill about equally the place of the \$460 millions of gold as a basis of credit. Impounding of gold has not reduced the lending power of

1917; there is also given the volume of commercial paper held by him against these; the rest is covered by gold and gold certificates on hand and by his credit balance in gold redemption fund held with the Treasury and by his balance with the Federal Reserve Board:

	(Millions)	(Millions)		(Millions)	(Millions)
January 5 . . .	\$300.5	\$18.9	April 5 . . .	\$400.7	\$22.3
" 12 . . .	300.3	18.9	" 13 . . .	431.	20.9
" 18-9 . . .	293.4	18.9	" 20 . . .	440.	22.0
" 26 . . .	291.6	18.3	" 27 . . .	446.	23.6
February 2 . . .	290.6	16.5	May 4 . . .	458.8	25.8
" 9 . . .	308.3	19.6	" 11 . . .	470.4	32.1
" 16 . . .	321.5	24.1	" 18 . . .	478.9	30.6
" 23 . . .	331.5	25.3	" 25 . . .	488.1	31.5
March 2 . . .	343.	26.3			
" 9 . . .	355.	26.8			
" 16 . . .	363.	24.7			
" 23 . . .	372.	22.7			
" 30 . . .	382.	21.9			

¹⁰ That is, the federal reserve notes are practically the same as gold certificates, and the net addition to the circulating media of the country is simply that small fraction represented by the commercial paper collateral; as shown, this was \$69 millions on June 15, 1917.

the federal reserve banks; this power is held in reserve and under emergency rediscounting is resorted to freely.¹¹

But the common defense of this accumulation of gold with the federal reserve agent is that when, following the war, the belligerents pull back from the United States their due share of the gold now piling up in our country, the holders of these federal reserve notes can withdraw from the federal reserve agents vast sums of gold without disturbing the credit structure, whereas, if it were in the reserves of local banks, the credit of these banks would have to be reduced many times the amount withdrawn. The force of this argument rests upon the assumption that federal reserve notes do not enter bank reserves, which assumption has been qualified above.

The National City Bank of New York has led a campaign of publicity seeking to persuade the money and credit world that it is desirable to have the federal reserve banks issue federal reserve notes directly for gold and to have the gold accumulate in the hands of the banks rather than of the federal reserve agents. It has been shown that, by a roundabout process of issue, the federal reserve notes come to be practically issued for gold and are like gold certificates. The gold, however, is in the hands of the agents rather than the banks and it cannot become the basis of issue of more notes than 100 per cent of its value; on the other hand, if it were in the hands of the banks, since they need only keep a 40 per cent gold reserve, this gold might become the reserve for two and one half times its value; this additional currency-issuing power, it is argued, would be most desirable in case of emergency and in case Europe drew back some of our gold hoards after the war. The federal reserve banks could give up vast sums of gold and, by rediscounts, fill the cavity by federal reserve notes using the residue of gold as a basis of issue. In other words, our ability to give up gold without precipitating a crisis would be materially increased if the gold of the United States could be concentrated in these central banks and the direct issue of federal reserve notes for gold would be an easy and effective way of bringing it about. At present the immense imports of gold flow either to the federal Treasury in exchange for gold certificates or to the member and state

¹¹ Actual instances of relief in such emergencies, though of minor size, are the tight money market in the first week of December, 1916, the series of bank failures in Seattle the first week of February, and the adjustments occasioned by the Liberty Loan subscriptions the second week of June, 1917.

bank vaults. That which goes to the Treasury is as ineffectively used as is that which goes to the federal reserve agent and for the same reason. That which goes to the banks' vaults becomes the basis of a credit structure which would topple if the gold were withdrawn. Hence it is best that the gold be concentrated in the federal reserve banks.

If federal reserve notes were issued by the federal reserve banks directly for gold, holders of gold instead of carrying it to the Treasury and getting gold certificates for it, would take it to the federal reserve banks and get federal reserve notes; and if the federal reserve notes were made legal for use as reserve money, it is likely that the member and state banks would deposit their gold with the federal reserve banks, and carry federal reserve notes as their reserve. This proposition goes further and would abolish the issue of gold certificates by the Treasury, leaving the whole field to the federal reserve banks and the federal reserve notes. The big central banks of Europe issue notes for gold directly; in fact, this is the sole function of the Issue Department of the Bank of England; and the strength of the note of the Bank of England is this gold cover.

This proposal has been a part of the general campaign to concentrate the gold of the country in the federal reserve banks. It would strengthen the potential lending and note-issue power of these central banks in case of need. The campaign for direct issue of notes for gold terminated successfully in the amendment of June 21, 1917. They may be now issued for gold or gold certificates. The gold and gold certificates held as collateral by the federal reserve agents for notes issued are now counted as part of the reserve which the federal reserve bank is required to maintain against its notes in actual circulation. *All* outstanding federal reserve notes are now shown as a liability of the federal reserve banks. There is the further provision that gold deposited with the Treasurer of the United States for the redemption of federal reserve notes is to be considered as if collateral security on deposit with the federal reserve agent.

In January the proposal to issue notes directly for gold was rejected by practically unanimous vote by the House committee, but Congress yielded in June under pressure of war contingencies. The opposition fought it on the ground that it was unnecessary; that, since it was bound up with the proposal to make federal reserve notes legal reserve for member banks, it was a form of pyra-

mided credit and fraught with danger of inflation; and that it was contrary to the principle of the federal reserve system which contemplated that every note issued was to be issued on the basis of a rediscounted commercial paper and was to be born with a business transaction and to cease with it, whereas the present proposal was to issue them as gold certificates and permanent currency. The first objection may be ignored; the second does not apply to the amendment as enacted nor is it consistent with acquiescence in accepting credit with the federal reserve bank as the only reserve of member banks; and the third objection ignores the real fact of issue of federal reserve notes for gold by a roundabout process.

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THE FALL RIVER SLIDING SCALE EXPERIMENT OF 1905-1910

In the cotton textile mills of Fall River, Massachusetts, between 1905 and 1910 an experiment was made in the determination of rates of wages by the method of the sliding scale agreement. From the standpoints both of the employers and of the employees immediately concerned this experiment constituted an attempt to secure a *modus vivendi* which would prove mutually beneficial and satisfactory. It is possible to view the subject of this experiment, then, as one that may throw some light upon the problems of collective bargaining in this particular industry, by the study of which employers and employees may be advised with reference to situations that may arise in the future.

But the broad, theoretical question is this: Were the Fall River sliding scale agreements of 1905 and 1907 fundamentally sound in principle? Their mere abandonment does not afford an answer. For soundness and unsoundness of theoretical foundations are often intricately confused with efficiency and inefficiency of administration. With the personal problems of administration connected with these particular sliding scale agreements we have no concern at this time. Attention is here centered upon matters of fundamental principle, with the assumption that the personal factors involved were of such a quality as to afford no justification for any attempt to place upon them the responsibility for disappointing results.

In attempting to reply to this question this paper will (1) present briefly the facts of importance to the understanding of the industrial situation in the Fall River cotton mills; (2) narrate without attempt at critical analysis the history of the sliding scale experiment, including in this part of the treatment, of course, the necessary descriptions and explanations of the agreements themselves; and (3) present an analysis of the experiment with a view to ascertaining its merits and defects.

The Industrial Situation in Fall River

The city of Fall River, with its population of approximately 120,000 and its cotton mills numbering about fifty, has the distinction of being the city first in importance in the cotton textile industry of the United States. Its 75,000 looms and 3,000,000 spindles, with the machines used in the subsidiary processes, require the services of approximately 30,000 employees. These em-

ployees, like the textile employees throughout New England, are for the most part foreign born or of foreign extraction. In Fall River the English and Irish groups have exerted a greater influence than in most of the New England cotton manufacturing centers; a fact which has doubtless been partially responsible for the superiority of the Fall River operatives over other groups in matters of organization for purposes of collective bargaining.¹

In general, the operatives of the different racial groups distribute themselves throughout the several departments of the mills in such a way that the heavier, coarser, and less skilled tasks fall to the groups of more recent admission to the country. Among these last-mentioned workers labor organization on the craft basis is developed very slightly, if at all. These workers, for the most part engaged in the less standardized, subsidiary or minor processes, lack strength of organization and depend quite largely for leadership in collective bargaining in matters involving wages upon the local organizations of mule spinners, weavers, slasher tenders, carders, and loom fixers. From time to time general textile organizations such as the United Textile Workers of America (organized in 1901) and more recently the National Amalgamation of Textile Operatives (organized in January, 1916) have exerted some influence with and in behalf of the local organizations of the Fall River operatives. But, at least for the period of the sliding scale experiment, the Fall River Textile Council, composed of representatives of the five major craft unions above named, served as the bargaining agency of the workers.

On the side of the employers the mechanism for collective bargaining has consisted, for a considerable number of years, of an organization now styled the Cotton Manufacturers' Association,² in the membership of which are included nearly all of the cotton mills of the city. The Fall River Iron Works, a corporation running about 12,000 looms and 485,000 spindles, is the one mill

¹New Bedford, the chief city in the fine goods manufacture, is a possible exception to this statement.

²This association was formed on April 19, 1873, as the Manufacturers' Board of Trade. The name was changed to its present form on October 27, 1890. Collective bargaining was first participated in on January 30, 1875, when the association dealt with a committee of weavers. The present Textile Council is first mentioned in the association's records on February 20, 1899, which may be considered to be the date of the termination of collective bargaining with the operatives simply as members of particular crafts.

of considerable importance which has persistently declined to deal indirectly with its own employees in matters concerning wages. Occasionally this mill has made changes in wages which have influenced the wage policy of the Cotton Manufacturers' Association. But the important fact is that throughout the mills of Fall River there was, even before the formal sliding scale agreements were made, substantial uniformity of wage policy and of changes of rates of wages.

In view of the extent to which the principle of the division of labor is applied in the manufacture of cotton yarn and cloth it is important for the purposes of this study that there has been substantial uniformity of changes of rates of wages as between the different departments of the mills.³ That this has been the case is the testimony of leaders of the Fall River craft unions, given in conversation or in correspondence with the writer. It is also the opinion of a Fall River manufacturer, Mr. J. T. Lincoln, expressed in an article on the sliding scale experiment written before the agreement was abandoned.⁴

Not only have changes in rates of wages been substantially uniform throughout the mill departments, but the weaving rate on a standard grade of print cloth has been the basis of discussion and of wage calculation in all general wage disputes. This statement applies both to the period of the sliding scale experiment and to the periods before and after.

With this brief explanation of the industrial situation in the Fall River cotton mills let us pass to the narration of the events of the sliding scale period.

The History of the Sliding Scale Experiment

On July 14, 1904, after a period in which conditions in the industry had been unsatisfactory both to the employers and to the employees, during which period unemployment had been ab-

³ An exception to this statement is the case in 1894 when, on the occasion of a general strike, only the mule spinners were successful. These received a wage advance of 5 per cent, while the rest of the operatives resumed work at the rates previously in force.

⁴ J. T. Lincoln, "The Sliding Scale of Wages in the Cotton Industry," *Quarterly Journal of Economics*, vol. XXIII, pp. 450-469. The quotation is from page 461. This article is chiefly narrative, and little attention is devoted to criticism. Where the writer of the present article has thought it necessary, for the sake of completeness, to repeat facts given by Mr. Lincoln, this repetition has been abbreviated, even at the risk of seeming to present an unbalanced treatment.

normally large and wages in the Fall River mills had been reduced about 10 per cent (in November, 1903), it was announced in the mills represented in the Cotton Manufacturers' Association that on July 25 there would be a further reduction of $12\frac{1}{2}$ per cent. As a result there occurred what is known in the industry as the "great strike of 1904." For nearly six months the Fall River cotton industry was at a standstill. Finally work was resumed on January 18, 1905, on the basis of an agreement "that Governor Douglas should investigate the matter of margins between the cost of cotton to the mill owners and the selling price of cloth, and submit his conclusions as to an average margin, upon which the manufacturers should pay a dividend of 5 per cent on wages earned from January 18 to April 1."⁵

On May 17, Governor Douglas reported that a margin of 74.38 cents was necessary to justify a wage "dividend" of 5 per cent. The margin on January 18 had been 67.80 cents, and had steadily grown smaller. The reduction of the weaving rate to 17.32 cents per cut was therefore accepted by the operatives, with the understanding that with the improvement of trade the mills would move wages up toward the level at which they had stood before the reduction of November, 1903.

On October 17, 1905, the Manufacturers' Association made to the operatives in the mills included in the organization a proposition as follows.⁶ Beginning October 23 wages should be increased about 5 per cent. In addition a sliding scale agreement should be made, according to which, whenever the employers' margin of profit (to be figured as the difference between the price of raw cotton and that of regular print cloth) should exceed 75 cents, there should be a wage dividend or premium of 1 per cent for each cent the margin stood above 75 cents up to a margin of 85 cents; and that for each cent the margin should exceed 85 cents up to a maximum of 95 cents there should be an additional wage premium of $\frac{1}{2}$ of 1 per cent. Calculations of margins and of wages should be made at the end of four-week periods, and the wage premiums should be given to employees of at least two weeks' standing.

⁵ *Commercial and Financial Chronicle*, Sept. 9, 1905, p. 808. See also *Textile World Record*, vol. XXIX, p. 593, and Massachusetts Board of Conciliation and Arbitration, *Annual Report*, January, 1906, pp. 20-22. The last-mentioned source gives Governor Douglas' full report. For an explanation of the method of calculating the margin of profit see note 9 of this article.

⁶ *Chronicle*, Oct. 21, 1905, p. 1268.

Immediately following this proposal of the Manufacturers' Association, the Fall River Iron Works announced an advance of about 14 per cent on the rates of wages prevailing before January 23, 1905.⁷ Dissatisfaction among the employees of the other mills caused by this move gave rise to some talk of a strike to secure similar concessions from the Manufacturers' Association.⁸ This, however, was soon quieted, the Textile Council coming to an agreement with the employers on October 25.

The arrangements then made embraced the same scale of graduated rates suggested in the employers' proposal of October 17, except that 72.5 cents rather than 75 cents was agreed upon as the base margin for a wage of 18 cents per cut for weaving regular print cloth. The base rate of 18 cents was to be the minimum rate. The proposed maximum margin of 95 cents beyond which the wage rate should not slide was excluded from the agreement. And in place of calculations of average margins and wages at intervals of four weeks, provision was made for weekly changes of rates. In the calculation of the margin, two grades of cloth (28-inch and 38½-inch 64 by 64 prints) were to be considered. It was tacitly agreed that the sliding scale should be given a fair trial for one year.⁹ The following schedule of hypothetical margins and weaving rates under this agreement of October, 1905, may help the reader to visualize the plan of wage determination and to make comparisons with later schedules:

Margins (Cents)	Weaving Rates (Cents)	Margins (Cents)	Weaving Rates (Cents)
115.....	22.95	85.....	20.25
110.....	22.50	80.....	19.35
105.....	22.05	75.....	18.45
95.....	21.15	72.5.....	18.00

This first formal sliding scale experiment was of short duration. For this there were two chief reasons. First, under this agreement, the average weaving rate in force was only 18.61 cents

⁷ *Chronicle*, Oct. 21, 1905, pp. 1268, 1269.

⁸ *Ibid.*, Oct. 28, 1905, p. 1329.

⁹ Some sources for the terms of this agreement are: *Chronicle*, Nov. 4, 1905, p. 1385; Lincoln, *loc. cit.*, p. 456; Massachusetts Labor Bulletin, No. 38, p. 342, No. 41, pp. 192-196; *Textile World Record*, vol. XXX, pp. 361-363.

The "margin of profit" which was involved in the sliding scale agreements of 1905-1906 and 1907-1910 and which was considered by Governor Douglas in the arbitration of the dispute of 1904-1905 was a margin of profit per unit of product—the differential between the cost of a certain amount of raw cotton and the price of the cotton cloth into which the raw material was con-

per cut of regular print cloth; which constituted an average "wage premium" of only 3.38 per cent, or only about one half of the desired restoration of wages to the level prevailing between November, 1903, and July, 1904. Second, the rates of wages paid fluctuated so violently from week to week (see Table 1) that the operatives became much dissatisfied and were led to question the validity of the theoretical foundation of the experiment.¹⁰

Dissatisfaction caused by these conditions was intensified when, in May, 1906, voluntary wage advances of 10 per cent were made by certain corporations in Massachusetts and Connecticut engaged in the manufacture of fine goods.¹¹ Although the employers in Fall River were insistent that "increases in fine goods mills, where margins of profit were large, should have no bearing on the general situation in Fall River,"¹² the Textile Council, voicing the feeling of the operatives with regard to the sliding scale, strongly urged the abandonment of the experiment and the restoration of the rates of wages prevailing before July, 1904. This request was made on June 8. On the sixteenth of the same month the Manufacturers' Association made a counter proposal, offering to guarantee a wage premium (on the basis of the sliding scale) of 5 per cent from June 12 to October 1 "with a further guarantee that if the margin in any one week exceeded this 5 per cent in-

verted. The exact method of computation of the margin under both agreements may be reduced to the following rules.

Multiply the price of middling upland cotton by 8 (to get the price of 8 pounds); multiply the selling price per yard of 28-inch print cloth by 45 (the number of yards in a cut); multiply the selling price per yard of 38½-inch print cloth by 33.11 (the number of yards in a cut); add these last two products; divide by 2; deduct the price of the 8 pounds of middling cotton.

For example, using the data for 1881 (see Table 3):

	<i>Cents</i>
45 yards 28" 64x64 print cloth @ 3.95c =	177.75
33.11 yards 38½" 64x64 print cloth @ 7c =	231.77
Sum =	409.52
Divided by 2 =	204.76
8 pounds middling upland cotton @ 12.03c =	96.24
Margin of profit =	108.52

It is to be noted that Governor Douglas considered only the 28-inch prints in making his computations.

¹⁰ For an elaboration of this point see Lincoln, pp. 456-459.

¹¹ *Chronicle*, June 23, 1906, pp. 1405, 1406.

¹² *Ibid.*, Sept. 8, 1906, p. 531.

TABLE 1.—ACTUAL MARGINS AND RATES UNDER AGREEMENT OF OCTOBER, 1905.¹

Week ended	Margins	Wage premiums	Weaving rates	Week ended	Margins	Wage premiums	Weaving rates
	(Cents)	(Per cent)	(Cents)		(Cents)	(Per cent)	(Cents)
1905				1906			
Oct. 27	77.00	5	18.90	Mar. 3	82.85	10	19.80
Nov. 3	75.70	3	18.54	10	80.19	8	19.44
10	71.40	0	18.00	17	81.27	9	19.62
17	74.00	2	18.36	24	77.82	5	18.90
24	73.50	1	18.18	31	75.42	3	18.54
Dec. 1	75.20	3	18.54	Apr. 7	76.15	4	18.72
8	72.40	0	18.00	14	75.02	3	18.54
15	75.02	3	18.54	21	74.82	2	18.36
22	73.76	1	18.18	28	75.55	3	18.54
29	75.37	3	18.54	May 5	72.85	0	18.00
1906				12	71.40	0	18.00
Jan. 5	76.41	4	18.72	19	70.68	0	18.00
12	78.09	6	19.08	26	71.14	0	18.00
19	75.23	3	18.54	June 2	73.28	0	18.00
26	75.56	3	18.54	9	75.56	2	18.36
Feb. 2	79.49	7	19.26	16	76.67	2	18.36
9	81.16	9	19.62	23	71.17	0	18.00
16	81.45	9	19.62	30	71.16	0	18.00
23	82.75	10	19.80				

¹ This table is constructed on the basis of the table presented by Mr. Lincoln on page 457 of his article. Computations for June, 1906, have been added; also actual weaving rates for the entire period.

crease they would pay the additional amount."¹³ When this plan was rejected the manufacturers yielded, promising to restore the rates desired (*i. e.*, rates based on a weaving rate of 19.80 cents), at the same time protesting that the margin of profit warranted no such advance, and claiming that the advance was made only in the interest of the general welfare of the city.¹⁴ The new schedule became effective July 2, 1906.

The weaving rate of 19.80 cents per cut thus established remained in force only a few months. A widening margin of profit and a demand for cotton goods so large that, in view of a reported scarcity of labor, it could not be satisfied,¹⁵ soon led to renewed

¹³ *Chronicle*, June 23, 1906, p. 1406.

¹⁴ *Ibid.*, June 23, 1906, p. 1448. Following the action of the Manufacturers' Association, the Fall River Iron Works increased the wages of its operatives 10 per cent, "giving them that advantage over the help in other mills of the city" (*Chronicle*, Sept. 8, 1906, p. 531).

¹⁵ *Ibid.*, Jan. 5, 1907, p. 60. Mr. Lincoln in his article (p. 459) says that the prosperity of the industry at this time was "greater than ever before known."

demands for wage advances. This time the request was for a restoration of the rates prevailing before the reduction of 1903. After some parleying, a counter proposal by the employers of a compromise at 5 per cent increase (with the promise of 5 per cent more in February, 1907, if conditions should be favorable),¹⁶ and a threat of strike on the part of the employees, the manufacturers yielded, and a rate of 21.78 cents was announced to take effect November 26. The margin at this time was about 95 cents.¹⁷ And it was a part of the settlement then made that the wage determined upon should be effective for six months, at the end of which period there should be a readjustment with reference to the then existing margin.¹⁸

Accordingly, near the end of April, 1907, discussion of the wage problem was again opened. The margin of profit was found to have widened quite substantially, and the advantages which might have accrued to the operatives had they not insisted upon abandonment of the sliding scale appeared very great. The demand of the operatives was for a 10 per cent advance. This the employers were disposed to refuse, but finally the advance was granted with a sliding scale agreement attached.

In brief, the provisions of this agreement were as follows. Eighteen cents per cut was established as the minimum weaving rate for 28-inch prints at a base margin of 72.5 cents. At a margin of 75 cents the weaving rate should be 18.68 cents, and above the margin of 75 cents rates were graded in accord with the margin changes indicated in the following tabulation until a maximum margin of 115 cents was reached at which the maximum weaving rate should be 23.96 cents. The scale of progression was slightly steeper than that provided in the agreement of 1905.

Margins (Cents)	Weaving Rates (Cents)	Margins (Cents)	Weaving Rates (Cents)
115.....	23.96	85.....	20.69
110.....	23.42	80.....	19.66
105.....	22.87	75.....	18.68
95.....	21.78	72.5.....	18.00

Second, the agreement provided that rates of wages should change only once in six months, calculations being made on the

¹⁶ *Chronicle*, Nov. 24, 1906, p. 1302.

¹⁷ *Ibid.*, May 11, 1907, p. 1129.

¹⁸ *Ibid.*, Sept. 7, 1907, p. 564.

last Monday of May and November of each year, the rate to be effective in each six-month period being determined by the average margin of the preceding six months. And, quoting from section 2 of the agreement, "there shall be no change in prices on either the ascending or descending scale unless the margin has reached a point indicated in the . . . schedule."

The new agreement went into force with a weaving rate of 23.96 cents, the highest rate allowed under the terms of the bargain, and also the highest rate which had ever been paid in the Fall River mills. But the extremely high margins of 1907 were of short duration; and 1908, 1909, and 1910 witnessed successive downward movements. Not only was this true, but, in 1907, difficulties in the financial world found their way into the cotton industry, with the result that curtailment of production was considered and well under way before the end of the year.¹⁹ Corporations supposed to be filling large orders were unable to secure ready money for use in purchasing materials and in meeting payroll demands, as jobbers were embarrassed by very high interest rates in making payments on deliveries of goods.²⁰ Through the spring of 1908 curtailment in the form of a short working week was still general.²¹ At points throughout New England other than Fall River reductions in wages were the order of the day. But at Fall River the sliding scale agreement for a time saved the operatives from this form of hardship. When, near the end of May, calculations of margins and of wages were made, they showed that the financial distresses had been followed by a marked decline of the margin (which in April and May had been between 50 cents and 60 cents) and that, in accordance with the agreement, the weaving rate must drop from 23.96 cents per cut to 19.66 cents—a reduction of 17.94 per cent. The spirit in which this, the largest single reduction of wages experienced by Fall River workers, was accepted deserves only the highest commendation.²² The operatives as a whole were as yet unwilling to declare the experiment

¹⁹ For interesting information regarding the methods adopted by the mill men throughout New England to secure uniformity of curtailment see the *Chronicle* of Nov. 16, 1907, p. 1237; Nov. 23, 1907, p. 1301; Dec. 28, 1907, p. 1653.

²⁰ *Chronicle*, Nov. 23, 1907, p. 1301.

²¹ *Chronicle*, Mar. 14, 1908, p. 631; Mar. 28, 1908, pp. 757, 758; May 23, 1908, p. 1293; May 30, 1908, p. 1308.

²² Mr. Lincoln on pages 465, 466 of his article gives in full the statement issued at that time by Mr. James Tansey, then president of the Textile Council. See also Massachusetts Labor Bulletin, No. 60, pp. 263-266.

a failure, although the mule spinners led an attempt to have the agreement abandoned through the required process of serving three months' notice.²³ Instead of abandonment, revision was resorted to in September, when the scale of margins and wages was graduated somewhat more nicely, the intervals between the margins named in the schedule being made uniform at two and one half cents, as is shown below. Another slight change was the making of provision for a delay of two weeks in the enforcement of new rates of wages at the end of each six-month period.

Margins (Cents)	Weaving Rates (Cents)	Margins (Cents)	Weaving Rates (Cents)
115.....	23.96	92.5.....	21.50
112.5.....	23.69	90.....	21.23
110.....	23.42	87.5.....	20.96
107.5.....	23.14	85.....	20.69
105.....	22.87	82.5.....	20.18
102.5.....	22.59	80.....	19.66
100.....	22.32	77.5.....	19.17
97.5.....	22.05	75.....	18.68
95.....	21.78	72.5.....	18.00

In November, 1908, calculation of the margin showed another marked decline, according to which the rates of wages, under the automatic operation of the agreement, were to be expected to drop to the minimum of 18 cents. Instead, the manufacturers waived their rights and allowed the existing rates to continue in force. The situation can best be made clear by quotation from the letter of the Manufacturers' Association to the Textile Council under date of November 19, 1908.²⁴

Believing that indications point to a prosperous season, the Manufacturers' Association is inclined to waive for the present occasion its right under the contract to reduce wages and to suggest, if it be agreeable to the Textile Council, that the present rate of wages be maintained for the ensuing period of six months, it being thoroughly understood that the extra wage thus paid is something over and above what is required by the contract, which still remains binding on both

²³ The whole amended agreement is found on pages 16-18 of the handbook (above referred to) of the Carders' Union.

²⁴ Handbook of the Carders' Union, p. 19. See also Massachusetts Bureau of Statistics, *Annual Report*, 1909, pp. 44-47; *Textile World Record*, vol. 36, pp. 314, 315. *The Textile World Record* said with reference to the action of the manufacturers: "They do this undoubtedly because they believe that insisting on the reduction would be an injustice. This is the practical recognition of the important fact that the wages of textile mill operatives are below the American wage standard" (vol. 36, p. 315).

TABLE 2.—ACTUAL MARGINS AND WAGES UNDER THE AGREEMENT OF MAY 14, 1907.

Dates of wage changes	Average margins for the preceding six-month periods	Weaving rates for the succeeding six-month periods	
		Rates called for by the agreement	Rates actually in force
	(Cents)	(Cents)	(Cents)
May 27, 1907	115.60 ¹	23.96	23.96
Nov. 25, 1907	130.89	23.96	23.96
May 26, 1908	79.00	19.66	19.66
Nov. 26, 1908	60.82	18.00	19.66
May 28, 1909	74.01	18.00	19.66
Nov. 29, 1909	66.90	18.00	19.66
May 30, 1910	66.15	18.00	Agreement abandoned

¹ The margin of profit upon which the weaving rate for the six months following May 27, 1907, was based was the average margin for a period slightly shorter than six months, ending April 30, 1907 (*Chronicle*, May 11, 1907, p. 1129). The other sources of the materials tabulated above are as follows: Lincoln, *loc. cit.*, 463; Massachusetts Bureau of Statistics, *Annual Report*, 1909, pp. 44-47; Massachusetts Labor Bulletin No. 56, p. 4; No. 60, pp. 263-266; *Textile World Record*, vol. 36, pp. 204, 205, 314, 315; vol. 37, pp. 329, 330; vol. 38, pp. 363, 365; vol. 39, pp. 552, 553.

parties and is offered as in some way a substantial recognition of the good faith of the operatives in remaining true to their contractual obligations.

If, therefore, the members of the Textile Council approve this suggestion, and thus indicate their understanding that no precedent is hereby established and that the textile agreement still remains in full force, the arrangement outlined above will become effective.

The *Commercial and Financial Chronicle* gives an additional suggestion of what the conditions were which made this action of the manufacturers possible.²⁵

It is explained [by the manufacturers] that supplies of cotton were secured much below recent quotations; had the manufacturers been forced to buy raw materials and sell products at current quotations, the waiving of the rights would not have been possible.

As is shown in Table 2, the succeeding periods of wage calculation witnessed repetitions of the employers' action of November, 1908. In February, 1910, the operatives, keenly disappointed at the failure of wages to slide upward, voted to withdraw from the agreement. This gave rise to fresh discussion of future rates of wages, and tentative plans were taken up. The proposal of the employees was that of a sliding scale in which 19.66 cents

²⁵ *Chronicle*, Dec. 11, 1909, p. 1509.

TABLE 3.—WAGES, PRICES, AND MARGINS AT FALL RIVER, 1880-1896.1

Changes of wages			Annual average wages, prices, and margins							
1	2	3	4	5	6	7	8	9	10	11
Years	Dates	New weaving rates in force	Index numbers of weaving rates Base (100)=21.00¢	Weaving rates	Index numbers of weaving rates Base (100)=21.00¢	Middling upland cotton per pound	28" print cloth per yard	28½" print cloth per yard	Margins	Index numbers of weaving rates Base (100)=21.00¢
		(Cents)		(Cents)		(Cents)	(Cents)	(Cents)	(Cents)	
1880		21.00				11.51	4.51	7.41	132.07	
1881			100.00	21.00	100.00	12.03	3.95	7.00	108.52	100.00
1882				21.00	100.00	11.56	3.76	6.50	99.73	91.90
1883				21.00	100.00	11.88	3.60	6.00	85.79	79.06
1884	Feb. 4	18.50	88.10	18.71	89.10	10.88	3.36	6.00	87.89	80.99
1885	Jan. 19	16.50	78.58	16.78	79.91	10.45	3.12	6.00	85.93	79.18
1886	Mar. 1	18.15	86.44	17.89	85.20	9.28	3.31	6.00	97.57	89.90
1887				18.15	86.44	10.21	3.33	6.00	92.58	85.31
1888	Feb. 13	19.00	90.48	18.90	90.00	10.03	3.81	6.50	113.09	104.20
1889				19.00	90.48	10.65	3.81	6.50	108.14	99.64
1890				19.00	90.48	11.07	3.34	6.00	85.92	79.17
1891				19.00	90.48	8.60	2.95	6.00	96.90	89.29
1892	July 11	19.60	93.34	19.39	92.34	7.71	3.39	6.25	118.10	108.83
	Dec. 5	21.00	100.00							
1893	Sept. 11	18.00	85.72	20.03	95.38	8.56	3.30	5.25	92.69	85.41
1894	Aug. 30	16.00	76.20	17.34	82.58	6.94	2.75	4.90	102.47	94.42
1895	Apr. 22	18.00	85.72	17.38	82.76	7.44	2.86	5.25	96.74	89.14
1896				18.00	85.72	7.93	2.60	4.66	74.21	68.39
1897				18.00	85.72	7.00	2.48	4.70	77.61	71.52
1898	Jan. 1	16.00	76.20	16.00	76.20	5.94	2.06	3.96	64.90	59.80
1899	Feb. 27	18.00	85.72	17.79	84.72	6.88	2.69	4.25	70.84	65.28
	Dec. 11	19.80	94.28							
1900				19.80	94.28	9.25	3.21	5.00	81.00	74.64
1901				19.80	94.28	8.75	2.84	4.62	70.38	61.86
1902	Mar. 17	21.78	103.72	21.36	101.72	9.00	3.11	5.00	80.75	74.41
1903	Nov. 23	19.80	94.28	21.55	102.63	11.18	3.25	5.00	66.46	61.24
1904	July 25	17.32	82.48	18.55	88.34	11.75	3.44	5.00	66.18	60.98
1905	Oct. 30	18.61	88.62	17.54	83.52	9.80	3.13	4.75	70.66	65.12
1906	July 2	19.80	94.28	19.39	92.34	11.50	3.63	5.12	74.44	68.60
	Nov. 26	21.78	103.72							
1907	May 27	23.96	114.11	23.08	109.92	12.10	4.62	6.00	106.48	98.12
1908	May 26	19.66	93.62	21.39	101.86	10.62	3.50	5.37	82.69	76.20
1909				19.66	93.62	12.68	3.67	5.06	64.90	59.80
1910				19.66	93.62	15.11	3.87	5.62	59.24	54.59
1911				19.66	93.62	13.01	3.54	5.24	62.32	57.42
1912	Mar. 25	21.62	102.96	21.16	100.76	11.52	3.82	5.22	80.21	73.91
1913				21.62	102.96	12.80	3.86	5.40	73.85	68.05
1914				21.62	102.96	11.13	3.48	5.19	75.18	69.27
1915				21.62	102.96	10.14	3.27	5.19	78.38	72.22
1916	Jan. 24	22.71	108.15	24.36	116.00					
	May 1	24.98	118.97							
	Dec. 4	27.48	130.86							

1The weaving rates actually in force have been taken from: (1) a table

per cut, the rate then being paid, should be the minimum rate, this to be paid at a margin of 67.5 cents or lower. The maximum rate proposed was 26.03 cents at a margin of 115 cents. Such given by Mr. Lincoln on pages 461, 462 of his article; (2) a table of rates presented on page 22 of the Member's Contribution Book of the Card and Picker Room Protective Association of Fall River and Vicinity; and (3) from tables published from time to time in the *New York Commercial and Financial Chronicle* in the annual report on cotton and cotton manufacture, e.g., Sept. 7, 1907, p. 564. The annual report on cotton is published usually in the early part of September.

The weighted average weaving rate prevailing each year was found by weighting each rate prevailing at any time during the year by the number of weeks the rate was actually in force; e.g., in 1899 the weavers worked 8 weeks at a piece rate of 16 cents, 41 weeks at 18 cents, and 3 weeks at 19.80 cents. The weighted average rate for 1899 is therefore 17.79 cents.

The price data are from M. T. Copeland's *The Cotton Manufacturing Industry of the United States*, Appendix, p. 393, supplemented by figures from the *Statistical Abstract of the United States* (from which Dr. Copeland's figures evidently were taken).

The figures representing the annual average margins of profit are from Dr. Copeland's book (p. 394) for the years up to and including 1910. They are computed by applying the rules for calculating the margin to the price data. The margins for the years 1911-1915 have been computed by the present writer.

In the fourth, sixth, and eleventh columns the actual weaving rates in force, the weighted average weaving rates, and the annual average margins of profit are converted into series of index numbers, using the figures for 1881 as the base (100). This base was selected because (1) it seemed desirable, in the case of the weaving rates, to use as a base a rate that was actually paid at some time, rather than an average of any series of rates; (2) the weaving rate of 21 cents prevailed for a longer continuous time than any other rate in the early part of the period under consideration; (3) the exact date when the weaving rate of 21 cents reported for 1880 became operative is not known to the writer and therefore it has not been possible to find the weighted average rate prevailing in 1880; and (4) it seemed advisable not to go back farther than 1881 for a base, in order to avoid abnormal price and wage conditions which may have existed in the period of the paper money standard.

Chart I presents curves showing for the entire period 1881-1916 the movements of actual rates and of annual average margins. In this chart the scale at the left measures the movements of wages, while that at the right measures the movements of margins.

Chart II shows curves plotted on the figures in the sixth and eleventh columns of Table 3. The purpose of this chart is to assist in studying the correlation between wages and margins, while Chart I is intended to depict the conditions as they existed and for the exact periods in which each set of conditions continued.

In Table 3 and Chart I, 18.61 cents per cut (the average rate under the first sliding scale agreement) is used as the rate prevailing from October, 1905, to July, 1906.

CHART I.—WEAVING RATES AND MARGINS AT FALL RIVER, 1881-1916.
(Actual rates and annual average margins.)

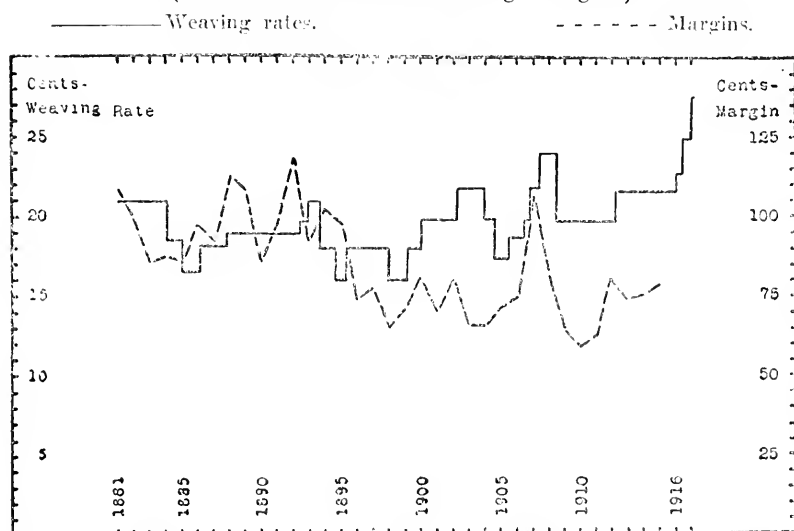
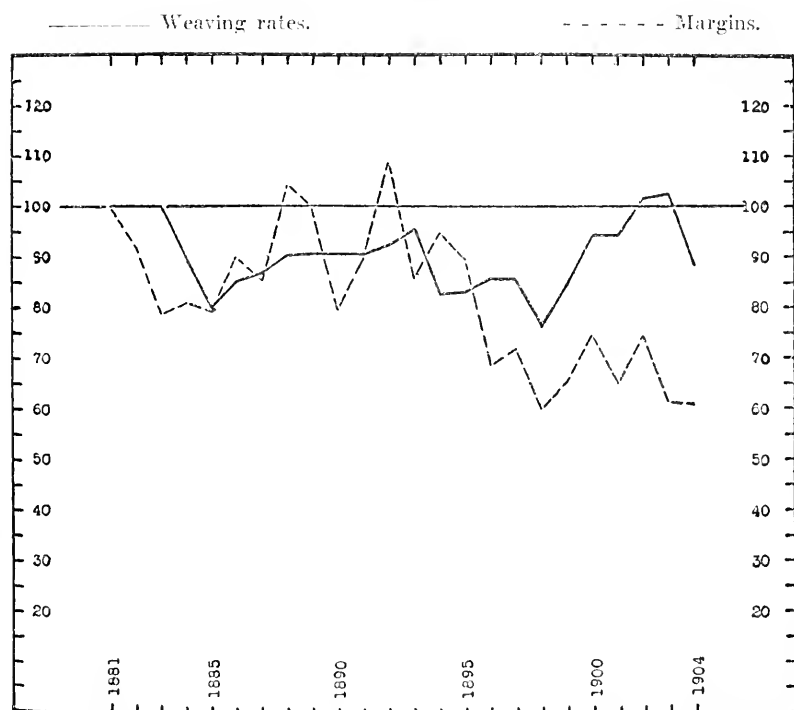


CHART II.—WEAVING RATES AND MARGINS AT FALL RIVER, 1881-1904.
(Index numbers of annual average weaving rates and margins.)

Base (100) = quotations for 1881.



a scale, if adopted, would have meant an advance all along the line of between 8 per cent and 10 per cent. The manufacturers would not agree to such a marked change, being willing to make only a smaller advance on the sliding scale basis. Consequently the sliding scale experiment was abandoned.²⁶

Criticisms of the Experiment

The first general criticism of the Fall River sliding scale experiment is that it did not rest upon an adequate foundation of experience. Table 3 and Charts I and II present the facts relating to the twenty-five years preceding 1905 upon which this criticism is based. Analysis of this material shows: (1) that changes of rates of wages had no consistent relationship to changes in the margin of profit; (2) that there was more accurate adjustment of rates of wages to upward movements of the margin than to downward movements; and (3) that the most important reductions of wages were contemporaneous with business disorders not limited to the cotton manufacturing industry.

In order to secure a more definite expression of whatever relationship may have existed between changes of wages and of market conditions in this industry, Pearson's formula for the coefficient of correlation has been applied to the data of Table 3 in the manner and with the results indicated in Table 4.

TABLE 4.—THE CORRELATION OF WAGES AND PRICES AT FALL RIVER, 1881-1904.

Subject	Relative	Allowance for lag	Coefficient	Probable error
1. Weaving rate	Margin of profit	None	+.0964	±.1355
2. Weaving rate	Margin of profit	One year	+.2297	±.1295
3. Weaving rate	Cloth prices ¹	None	+.4315	±.1114
4. Weaving rate	Cloth prices ¹	One year	+.3506	±.1200
5. Weaving rate	Raw cotton prices ²	None	+.5648	±.0932
6. Weaving rate	Raw cotton prices ²	One year	+.3306	±.1218

¹ Averages of the prices of 28-inch and 38½-inch prints.

² Average annual prices of middling upland cotton.

From this it appears that the correlation between the weaving rate and the margin was smaller than that between the weaving rate and either cotton or cloth prices. This is true even when

²⁶ *Chronicle*, Sept. 10, 1910, p. 622.

allowance is made for a lag of one year in the adjustment of wages to changing commodity market conditions. Rather singularly it appears that the coefficient of correlation between weaving rates and raw cotton prices of the same year is the only coefficient of the six greater than $+0.5$ (and if from this coefficient the probable error be subtracted the coefficient falls below the $+0.5$ mark); singularly, because, if one assumes a direct causal relationship between margins and wages, one would expect that the increase of cotton prices would tend to lower wages, not to raise them.

Whatever be the explanation of the relative values of these coefficients, we must conclude that the sliding scale agreements were founded upon no basis of experience; that they cannot be regarded as providing a mechanism to secure the frictionless operation of the competitive forces through which wages in this industry had previously been adjusted.

Second, the most elaborate and nicely adjusted system of determination of rates of wages offers no guarantee against unemployment; and we have seen that the Fall River operatives, in their brief experience with the sliding scale, found that curtailment of production by means of short-time operation was still an unsolved problem.

Under unsatisfactory conditions of manufacture the employer has two means of securing relief so far as his relations with his employees are concerned; namely, the reduction of rates of wages and partial or complete stoppage of production. It is evident that the method of a horizontal reduction of wages, particularly of piece rates, presents to the manufacturer the most direct way of reducing costs per unit of product. On the other hand, the successfulness of an attempt to lower rates of wages when the margin is small and when, from the standpoint of the manufacturer, a direct lowering of the cost per unit is most to be desired may be limited, even though indefinitely, by the approach of real earnings to the minimum of the worker's standard of living. As to the conditions of trade, these may be such that the method of rate cutting defeats its own purpose. Rate cutting, by decreasing costs, tends to encourage large production. At a time of overproduction, when the mills have on hand large stocks of goods unsalable except at low prices, the obvious remedy is not further manufacture but short-time operation or dismissal of part of the operative force. For a low cost of production in the immediate future cannot remedy the hardships resulting from high cost of

goods held in storehouses and not marketable at a profit. On the other hand, the partial suspension of work has the advantage of actually curtailing output and also of being able to be effected with less open opposition on the part of employees.

Systematic and combined curtailment of output, although difficult of successful enforcement, has been sufficiently prevalent in the New England cotton manufacturing industry to have an important bearing upon the soundness of the sliding scale plan. It is of considerable importance that this curtailment has occurred with no appreciable seasonal regularity. While it is true that the months of July, August, and September (when mill stocks of raw materials are approaching exhaustion and managers are waiting for the marketing of the new crop) are the months which most frequently show employment below the average for the year, it is also true that this seasonal swing is very slight. Unemployment that occurs irregularly offers greater difficulties to be overcome in wage agreements than that which is regularly recurring.

The following figures, when compared with the content of Table 3, will help to show the importance of the present point of criticism.

UNEMPLOYMENT IN THE MASSACHUSETTS COTTON MANUFACTURING INDUSTRY.

(As measured by the per cent which the number of cotton textile operatives unemployed at some time in each year formed of the average number of employees for that year. Computed from the annual reports of the Massachusetts Bureau of Statistics on the Statistics of Manufactures.)

Years	Per cent of unemployment	Years	Per cent of unemployment
1886.....	10.7	1900.....	4.1
1887.....	7.5	1901.....	8.8
1888.....	10.7	1902.....	3.0
1889.....	2.2	1903.....	13.4
1890.....	2.2	1904.....	24.1
1891.....	1.6	1905.....	5.5
1892.....	1.9	1906.....	2.7
1893.....	23.4	1907.....	2.1
1894.....	27.4	1908.....	19.7
1895.....	3.4	1909.....	3.8
1896.....	19.1	1910.....	7.2
1897.....	12.9	1911.....	9.0
1898.....	10.9	1912.....	9.8
1899.....	3.4	1913.....	7.5

In this period of twenty-eight years there were ten years (1886, 1888, 1893, 1894, 1896, 1897, 1898, 1903, 1904, and 1908) in which the number of cotton textile employees reported to have been unemployed at some time during the year constituted at

least 10 per cent of the average number of employees for that year. Of these ten years, two (1886 and 1888) were years in which this unemployment existed while wage advances were made at Fall River. In two other of these ten years (1896 and 1897) rates of wages at Fall River were unchanged. While in the remaining six years (1893, 1894, 1898, 1903, 1904, and 1908) unemployment existed in the face of very substantial wage cuts. In other words, in these six years wage reduction was supplemented either by part-time operation or by temporary dismissal of a part of the operative force.²⁷ With the particular form of curtailment which caused this unemployment we are not here concerned except to note that at Fall River the tendency has been for the manufacturers to act collectively, to run on part time, and thus to retain the advantages of the existing factory organizations of the labor force.

In an industry in which such conditions as these prevail it cannot be ignored that a sliding scale plan may be ever so finely elaborated solely with reference to rates of wages and still offer no guarantee that the wages thus determined shall actually be paid; for the sliding scale does not assure employment. It merely provides that, if there is employment to be had, compensation shall be on a prearranged plan. If, however, the sliding scale system does sometimes tend to reduce unemployment by bringing about almost frictionless reductions of wages, then it devolves upon the laborer to weigh for himself the alternatives of steady work at low pay or more fluctuating employment at a higher rate of compensation per piece or per hour.

Third, the so-called margin of profit is not adequate to indicate the wage-paying ability of an industry, assuming that the true unit margin of profit can be ascertained and that no difficulty exists to hinder or prevent the collection and utilization of price information in computing this margin.

The philosophy of the sliding scale appears to be this: that it will eliminate from industry the friction of industrial warfare and its consequent social waste, at the same time giving reasonable assurance that the individuals and corporations concerned

²⁷ While the comparison of unemployment in mills throughout the state with wage conditions at Fall River is not as conclusive as might be desired, it is made here, first, because the information available concerning unemployment at Fall River is inadequate, and, second, because Fall River, as the foremost city in the New England cotton industry, is generally considered to typify conditions elsewhere in New England.

shall lose nothing which the operation of competitive forces would secure for them. In a sense the sliding scale is a prosperity-sharing plan. Now it is quite obvious that the prosperity of the cotton manufacturing industry is not a thing to be measured merely by the manufacturer's gross margin of profit. This method of prosperity measurement takes no account of the changing volume of trade under changing margin conditions. It is entirely conceivable that the textile mills of a New England city may secure larger sums available for dividends under conditions of narrow margins and large sales than under conditions of wide margins and small sales. The statistical demonstration that such gains have been made in any particular case is, of course, difficult, if not impossible, since it would require access to the accounts of the manufacturing corporations. Yet the impossibility of proof or disproof is beside the point, for we are not so greatly concerned with what has actually happened as with what may happen under such conditions as have been described.

To these considerations bearing upon the inadequacy of the margin as a basis for wage calculation add another—that the margin as calculated at Fall River was a crude one, which ignored entirely not only the volume of trade but also the existence of fixed charges upon the business.

As concrete evidence of the inadequacy of the margin basis of wage adjustment witness the failure of the Fall River manufacturers to insist upon rigid adherence to the terms of the agreement of 1907, when, in 1908, "believing that indications point[ed] to a prosperous season" they made slight recognition of existing low margins. That the mill owners, through their representatives, were scrupulously insistent that their considerate action should not be regarded as a precedent is beside the point. A schedule of margins and rates of wages had been made the basis of formal agreement, and within eighteen months the schedule was found to rest upon an inadequate foundation.

Fourth, it is doubtful whether it is practicable to find the real margin of profit. The sliding scale agreements are to be criticised on the ground that in the calculation of the margin of profit only two grades of cloth were considered. Although at Fall River there is a greater degree of homogeneity of the cloth products of the mills than is found in many of the New England textile centers, it is true that here at any one time thousands of employees are engaged in the production of cloths other than the 28-inch and

38½-inch prints. If the wages of these operatives are to slide in accordance with changing margins of profit, it would seem no more than reasonable to expect that the margin be calculated with reference to more than two kinds of cloth. For there can be no assurance that the prices of these two cloths are indicative of the cloth market so far as these mills are concerned.²⁸

A similar criticism might be made of the use of quotations on middling upland cotton alone. But this criticism is of minor importance, for there is reason to think that the prices of the several grades of cotton other than the middling upland bear a more constant relation to those of the latter grade than do the prices of all the different cotton fabrics to those of regular and standard prints. However this may be, we are concerned with cotton prices more with respect to the extent to which these quotations are indicative of mill costs, assuming the logically most simple possible condition, namely, that only middling cotton is used by the mills—a condition which is, of course, contrary to fact.

This is a matter which has to do with the times of margin calculation and wage adjustment under a sliding scale. The evil result of weekly calculations has already been indicated in the narrative of the events of the first experiment in 1905-1906. No doubt the six-month basis was an improvement. But there is a difficulty present no matter upon what intervals agreement is reached. There is not much object in averaging raw cotton prices for a week or even for six months with a view to determining wages unless it is known that the cotton used in production was actually bought at the prices averaged. Examination of commercial statistics shows that by far the heaviest buying of cotton stocks by northern mills is in the months of October, November, December, and January of each year. In the five years of the sliding scale experiments an average of over 57 per cent of the takings of cotton by mills in the northern part of the United States and Canada was in these four months.²⁹ The lowest percentage of these takings in these four months (45) was in the season 1907-1908, and the highest (66) in the season 1909-1910. It is evident that any system of basing wages on margins averaged

²⁸ In this connection it is interesting to note that the 28-inch 64 by 64 prints are no longer regarded as typical mill products. The best statistical tabulations of cloth prices now give quotations on 27-inch 64 by 60 prints.

²⁹ This computation is from Shepperson's *Cotton Facts*, edition of Dec., 1907, p. 26; edition of Dec., 1910, p. 26.

for six-month periods ending in May and November does not fairly allow for the uneven distribution of cotton purchases throughout the year. And yet an adjustment of the dates of margin and wage calculations to meet this seasonal fluctuation is not easy, for the fluctuation is not regular.

To make a more positive statement of this criticism—the calculation of margins, if made at all, should be made with a knowledge of the prices at which the mills concerned have actually bought supplies of cotton, and with a knowledge also of the prices actually received from time to time for the mill products. Only in this way can the real margin be ascertained. Probably this criticism is destructive rather than constructive. It is doubtful whether it would be feasible to make a sliding scale agreement which would reveal not only to employees but also to competitors the marketing policies of each corporation.³⁰ The probable result of such an attempt to eliminate labor disputes would be the bargaining of each mill with its own employees and the elimination of collective bargaining on a large scale. It is reasonable to suppose that mill owners would resort to pure profit sharing rather than accept a system which would disclose the methods by which the profits were secured.

Fifth, this experiment was based upon the ungrounded assumption that wages in any one industry can be determined by rules which relate only to the internal affairs of that industry.

The ability of cotton textile operatives to secure an advance or to resist a reduction of wages cannot be measured solely by market conditions within the cotton industry. Margins of profit have to do with the demand for labor; but they are not directly related to its supply. The latter cannot be regarded as a fixed or even steadily growing quantity. It varies on the one hand with population changes, both quantitative and qualitative. That labor supply tends to conform to labor demand is a mere truism, which means that the number of goods or services sold must be equal to the number of goods or services bought. But the demand for textile operatives is not the only demand which textile operatives can supply. Within the last two years textile workers have found a demand for their services in munitions plants,³¹ and this fact has probably exerted no inconsiderable influence in enabling

³⁰ See the statement of Mr. Edward Stanwood, secretary of the Arkwright Club of Boston, in a review of Dr. Copeland's book in the *AMERICAN ECONOMIC REVIEW*, vol. III (June, 1913), p. 372.

³¹ *Chronicle*, Aug. 29, 1916, p. 677.

these operatives to receive in 1916 advances in wages aggregating about 30 per cent. It must be evident that any formal agreement, however elaborately drawn, cannot be expected to guarantee to either workers or their employers all that could be secured by hard bargaining under competitive conditions. That is, at comparatively frequent intervals the whole sliding schedule would have to be considered anew. *Ipsa facto* the scale would not slide; it would become a new scale.

This brings us to a final critical comment upon the sliding scale plan: that the detailed construction of a schedule of margins and wages, in the last analysis, is a matter of the comparative bargaining powers of employers and employees.

As we have seen, the sliding scale experiment was abandoned in 1910; first, because the employees were dissatisfied with the failure of the rates of wages to slide upward, and, second, because they were unable, in considering the extension of the agreement, to raise the whole scale of rates to a level satisfactory to themselves. In spite of the fundamental unsoundness of the whole scheme, it is not improbable that it would have been continued in operation later than the spring of 1910, if both sides had been able to agree upon a schedule.

The difficulty seems to be that there is no criterion by which the economic correctness of any proposed schedule may be judged. What would be an economically correct schedule? Presumably such would be a schedule which would accord to either party all that could be secured by the most vigorous and keen bargaining. Or, to put the question in another form, what is the criterion of the wage-paying ability of an industry? We do not know. The answer is still in process of being evolved in the cases of public and quasi-public utilities. Governor Douglas, in 1905, when arbitrating the wage dispute at Fall River, made certain allowances for dividends and for depreciation. But other authorities might make different allowances for the same items. This is a difficult problem, especially in the case of the Fall River mills, regarding whose capitalization comparatively little is publicly known.³²

The answer to the last two criticisms (that adjustments of any sliding schedule must be made periodically to meet changing industrial conditions and that there is no criterion by which the sliding schedule may be made accurately to reflect the state of competitive markets for labor) may be of this nature: that great

³² Cf. Copeland, *op. cit.*, ch. 15.

nicety of adjustment is not to be expected in such a schedule; that some gain will be effected if only the wastes of industrial conflict can be avoided; and that "in the long run" one side will gain through this inaccuracy of adjustment as much as the other. Of this last contention, however, there is no certain proof. While it might be safe to rely upon this supposed tendency to equalize advantages and disadvantages thus arising, if the sliding wage scheme were fundamentally sound, we have seen that in the Fall River case, at least, this soundness did not exist.

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THE WAR AND TRANS-PACIFIC SHIPPING

Ocean freight rates are popularly said to be determined by demand and supply—that is, by the ratio between the freight offered for shipment and the vessel tonnage available for carrying this freight. As competition is a very potent force in water transportation, this ratio constantly changes with variations in the movement and volume of trade and in the enlargement or contraction of available vessel tonnage. The phenomenal rise of ocean freight rates since the outbreak of the present European war has been due in the main to the withdrawal of the great mercantile fleet of Germany from ocean commerce and the requisition of a large proportion of the better class of mercantile tonnage for war purposes by the allied governments. And the destruction of vessels by submarine activity has contributed its share to the increase in ocean freight rates.

Some marked changes in the nature of trans-Pacific trade and shipping have been wrought by the rise of transportation costs on ocean highways. The trade of China has had need of more vessel tonnage than before the war, and thousands of tons of Chinese products offered for export have been unable to find space, while corresponding amounts of imports could not be booked because of the lack of vessel tonnage. Shipment of American lumber and flour is seriously limited, if not rendered impossible, with present freight rates. The export of American kerosene to China is materially reduced because of a hundred per cent increase in price, due to the rise of transportation costs.¹ Complaints of lack of space and high freight rates are also made in the Philippines and in Australia.²

Before the war freight rates across the Pacific Ocean were among the lowest for any similar haul in the world. Competition from Japanese subsidized lines made it practically impossible for other concerns to remain in the trans-Pacific service without the financial support of or actual ownership by American railroad companies. The Pacific Mail Steamship Company, by far the most important of the American trans-Pacific lines, was controlled by the Southern Pacific Company. The Great Northern Steamship Company operating the largest steamer flying the American flag (the Minnesota) was owned by the Great Northern Railway

¹ Bureau of Foreign and Domestic Commerce, Miscellaneous Series, No. 41, p. 7.

² Daily and Consular Trade Reports, 1915, No. 95, p. 386.

Company. Neither of these companies can be said to have been a financial success during the years immediately preceding the war. Charges in the coasting trade in the Orient were such that most of the coast shipping companies had difficulty in staying in the business. On the Chinese coast, British and other lines were restricting their services, passing dividends, and even selling ships and withdrawing from trade.³

Even before the war, then, British and American shipping was feeling the effects of Japanese competition, which was intensified by the government's policy of granting special subsidies to the great line companies. These companies were slowly increasing their proportion of the total trans-Pacific trade. A very small part of this trade was carried in tramp vessels.⁴ The principal reason for the insignificant role played by the tramps was that the freights offered line vessels were distributed with fair uniformity throughout the year and exhibited no great fluctuations from one year to another. This comparative uniformity enabled the Pacific conference, to which the line companies—American, British and Japanese—belonged, to keep the tramp for the most part out of the trans-Pacific trade. The potential rather than the real competition of the tramp, however, kept freight and passenger rates low. Trade was steady, but rates enabled British, American, and German lines to live only at "the minimum of subsistence."

The outbreak of war reduced the vessel tonnage of the Pacific at a time when the freights offered for shipment showed a marked tendency to increase. Readjustments in shipping, on account of the mercantile tonnage taken from the ordinary channels of trade, favored Japan, which was far from the scene of belligerent activities. This country experienced an increased demand for its products, and, being well equipped to supply munitions of war, developed a great trade. Its large mercantile marine was obliged to devote the major portion of its facilities to assisting Japanese

³ Daily Consular and Trade Reports, 1914, No. 284, p. 1017.

⁴ The writer was informed by the foreign department of the San Francisco Chamber of Commerce that in ordinary times about 2 to 5 per cent of the freight passing in and out of that port is carried by tramps. The term "tramp" is here used to designate a vessel operating over no regular route and with no regular schedule of sailings. A chartered vessel operating over a regular route but with irregular sailings is not a tramp. The percentage of transoceanic freight carried by tramps was apparently larger in some of the ports of the Northwest than at San Francisco. But at San Francisco and Seattle, the two most important American ports on the Pacific, the proportion of freight carried by tramps was small.

trade. The withdrawal from business of the old Pacific Mail Steamship Company and the sale by that company of some of its steamers to the Toyo Kisen Kaisha in the fall of 1915⁵ materially increased the hold of Japan upon the trans-Pacific trade. The general trend may be indicated by comparing the ownership and tonnage of "line" vessels operating in the transoceanic trade between China, Japan, and Asiatic Russia, on the one side, and the Pacific coast of Canada and the United States, on the other, in July, 1914, and May, 1916.⁶

TABLE 1.—OWNERSHIP AND TONNAGE OF TRANSOCEANIC TRADE BETWEEN CHINA, JAPAN, AND ASIATIC RUSSIA, AND THE PACIFIC COAST OF CANADA AND THE UNITED STATES.

JULY, 1914

	Number of steamers	Gross tonnage	Net tonnage	American ports of call
American flag—				
Pacific Mail	5	54,898	31,992	San Francisco
Great Northern	1	20,718	13,324	Seattle
Robert Dollar S. S. Co.	1	5,356	3,685	San Francisco
Total American	7	80,972	49,001	
British flag—				
Pacific Mail	2	10,244	8,929	San Francisco
Canadian Pacific	5	51,737	27,624	Vancouver
Royal Mail and Glen Line	8	47,039	29,774	{ Seattle, Tacoma, & Portland
Blue Funnel Line'	3	29,423	18,781	
Robert Dollar S. S. Co.	2	8,623	5,602	
Total British	20	147,076	90,710	Seattle & Tacoma
German flag—				
Hamburg-American Line	6	35,090 ¹	22,582 ¹	{ Seattle, Tacoma, & Portland
Japanese flag—				
Nippon Yusen Kaisha	6	38,106	23,235	Seattle
Toyo Kisen Kaisha	5	52,875	28,701	San Francisco
Osaka Shosen Kaisha	6	36,706	22,772	Seattle
Total Japanese	17	127,687	74,711	
Grand Total	50	290,825	237,004	

¹ Tonnage estimated for two steamers of Hamburg-American Line.

⁵ Commerce Reports, October 16, 1915, p. 226.

⁶ The names of companies are taken from the publications of the Bureau of

TABLE 2.—OWNERSHIP AND TONNAGE OF TRANSOCEANIC TRADE BETWEEN CHINA, JAPAN, AND ASIATIC RUSSIA, AND THE PACIFIC COAST OF CANADA AND THE UNITED STATES.

MAY, 1916

	Number of steamers	Gross ton- nage	Net ton- nage	American ports of call
American flag— China Mail	1	5,060	3,186	San Francisco
British flag— Canadian Pacific	4	45,803	24,570	Vancouver
Dollar Line	2	8,633	5,602	San Francisco
Blue Funnel Line	3	29,423	18,781	Seattle & Tacoma
Total British	9	83,859	48,953	
Dutch flag— Java-China-Japan . . .	4	36,000	. . .	San Francisco
Japanese flag— Nippon Yusen Kaisha . .	6	37,788	23,038	Seattle San Francisco & Los Angeles Seattle
Toyo Kisen Kaisha . . .	8	75,233 ¹	41,998 ²	
Osaka Shosen Kaisha . .	7	49,511	30,569	
Total Japanese	21	162,532 ¹	95,605 ²	
Grand Total	35	287,451 ¹	147,744 ³	

¹ Including one steamer of the Toyo Kisen Kaisha whose gross tonnage is estimated.

² Including three steamers whose net tonnages are estimated.

³ Including three steamers whose net tonnages are estimated and excluding the net tonnages of four steamers of the Java-China-Japan Line.

Of the aggregate of over 390,000 gross tons which was engaged regularly in trans-Pacific trade before the war, about 20 per cent sailed under the American flag, about 37 per cent under the British flag, and about 33 per cent under the Japanese flag. The gross tonnage of the vessels operated by the Hamburg-American Line was a little over 35,000, or less than 10 per cent of the total.

Foreign and Domestic Commerce, Miscellaneous Series, No. 44, for the year 1916, pp. 9-11. Vessel tonnages are those of Lloyd's Register of British and Foreign Shipping, List of American Merchant Vessels, published by the Bureau of Navigation, and in three or four cases rough estimates of tonnage on the basis of carrying capacity given in Miscellaneous Series, No. 44, above mentioned.

Tramps did not play a prominent part, and a liberal allowance for these vessels would probably not raise the total above 420,000 or 430,000 gross tons.

It is evident from the figures tabulated above that no nation could, in July, 1914, claim a predominant position in the trans-Pacific carrying trade. The gross tonnage of vessels flying the British flag (147,076, approximately 37 per cent of the total for line vessels) was greater than that of any other nation. Owing to the infrequent service of the Royal Mail and Glen Line and the rather small freight-carrying capacity⁷ of the fast steamers of the Canadian Pacific, the proportion of the annual cargo-carrying capacity offered by British ships in the trans-Pacific trade was considerably smaller than its total gross tonnage. The estimated annual cargo-carrying capacity of all the vessels so engaged was at that time 1,400,000 tons. Of this regular carrying trade the American steamers had about 25 per cent, Japanese 26 per cent, and British 30 per cent.⁸

The total gross tonnage of vessels regularly operated in the trade in May, 1916, was approximately 287,000, or about 26 per cent less than the regular tonnage before the war. Of this tonnage, less than 2 per cent was American, 30 per cent British, 13 per cent Dutch, and over 55 per cent Japanese. Not only did the three great line companies of Japan engaged in the trans-Pacific service increase their proportion of the total gross tonnage, but they also augmented the number and tonnage of their steamers, while the tonnage of other nations (excepting the Dutch who became regular carriers after the opening of the war) materially declined or was withdrawn.

The predominance of Japan is still further accentuated by the increase in the number of tramp steamers. Since the outbreak of the war many tramp steamers have entered the field and are now carrying full and profitable cargoes.⁹ It was estimated in the

⁷ The gross or net tonnage of a vessel does not correspond to its cargo-carrying capacity. On fast steamers a large proportion of the space is likely to be devoted to passenger and mail service. The freight transported on such vessels is usually small in bulk and high in value.

⁸ Miscellaneous Series, 1916, No. 44, p. 8.

⁹ It is difficult to make any close estimate of the proportion of trans-Pacific freight carried in tramp vessels, as many "tramps" are operated for the present over definite routes. The writer was told at the foreign department of the Chamber of Commerce of San Francisco that about 75 per cent of the freight now passing through that port goes in chartered vessels or "tramps." However, a considerable part of this freight goes in steamers chartered by the regular line companies.

summer of 1916 that Japanese owners possessed some 272 tramp steamers aggregating 715,000 gross tons, of which 34 with a combined gross tonnage of 130,000 were operated in the trans-Pacific trade. This tonnage must be added to that of the regularly operated steamers of the three Japanese line companies above tabulated. While American tramps are operating in this transoceanic service, their number is relatively small. The addition of Japanese tramp steamers thus increases very materially Japan's predominant position.¹⁰

In August, 1916, the new Pacific Mail Steamship Company began its trans-Pacific service. Three steamers were purchased, the Ecuador, the Venezuela, and the Columbia. These vessels are now sailing under the American flag between San Francisco and the Orient. Each has a gross tonnage of 5,687.¹¹ The vice-president and general manager of the Pacific Mail Steamship Company is reported¹² to have recommended recently the immediate expenditure of \$10,000,000 to \$15,000,000 in the improvement of its trans-Pacific service, the money to be used in the purchase or construction of two 25,000-ton liners and two or three intermediate liners. The carrying out of these plans would go far toward restoring the American flag to the Pacific where a much larger proportion of our foreign trade had heretofore been carried in American vessels than on the Atlantic coast.

In addition to the Pacific Mail and China Mail, both operating vessels under the American flag, several American tramp steamers under time charters have appeared in this trade during the last two years. Other American ships, according to indications, are likely to operate in the near future. The entrance of the United States into the present European conflict may check this development and allow Japan to increase still further her hold on the trans-Pacific service.

The outbreak of the war caused a material reduction in the vessel tonnage regularly operating between the Orient and the Pacific coast of the United States and Canada. While this reduc-

¹⁰ This predominance is more strongly stated in Commerce Reports, 1915, No. 243, pp. 226 and 227. The Japanese tonnage available for the trans-Pacific trade is there given as 430,000 out of a total of 490,000. This figure, however, is in excess of the tonnage engaged *solely* in the trans-Pacific business, even including the tonnage operating between Japan and the Pacific coast of South America.

¹¹ Annual Report of the Pacific Mail S. S. Co., 1916, p. 14.

¹² *Seattle Post-Intelligencer*, March 31, 1917.

tion was offset in part by the increased number of tramps operating between the two coasts, the irregularity of tramp service has kept the annual cargo-carrying capacity somewhat below what it was before the war. The freight moved, however, has increased in value. A comparison of the exports and imports of the Pacific coast of the United States between the year closing June 30, 1914, and the year following will show approximately the extent of this increase for the United States during the first year of the war.¹³

Period	Imports	Exports including re-exports	Total
Year closing June 30, 1914	\$138,478,715	\$136,243,148	\$274,721,863
Year closing June 30, 1915	158,858,408	173,685,617	332,544,025

Since June 30, 1915, the commerce of the Pacific coast has greatly increased, due in part to the exports to Asiatic Russia. During the first year of the war the exports from the United States to Siberia leaped from \$1,214,506 to \$23,953,151, more than one half of which was shipped through the Washington customs district.¹⁴ During the first eight months of 1916 the shipments from Puget Sound ports alone to Vladivostok amounted to over \$78,000,000.¹⁵ The three most important items among these exports were commodities used largely for war purposes:

Upland cotton	\$17,071,126
Gun powder	15,489,265
Other explosives	10,582,264
	<u>\$43,142,655</u>

Much of this growth in trade represents increased values rather than increased freight tonnage. The fact remains, however, that on the Pacific coast the war conditions which produced a shortage of shipping facilities also contributed to an augmented demand for vessel tonnage.

The effect of this situation in the trans-Pacific shipping is noticeable in two directions—the industrial condition on the Pacific coast due to the lack of an adequate vessel tonnage, and the utilization by Japan of her predominant position in the transoceanic

¹³ Figures taken from the volumes on *Commerce and Navigation of the United States* for the years 1914 and 1915.

¹⁴ *Ibid.*

¹⁵ *Seattle Times*, Oct. 5, 1916, Statement of Mr. W. B. Henderson, the Seattle representative of the Federal Bureau of Foreign and Domestic Commerce.

trade to give her own industries an artificial advantage in the commerce of the Pacific.

A large percentage of the commodities produced for export on the Pacific coast are of low value in proportion to bulk. In the year closing June 30, 1914, the fiscal year immediately preceding the war, the exports from all the customs districts of the Pacific coast of the United States aggregated \$134,806,148.¹⁶ Of this amount over half consisted of breadstuffs, wood and manufactures of wood, mineral oil, canned salmon, and fruit. The greater part of the remainder embraced articles shipped from eastern points to the Orient through Pacific coast ports. The groups of commodities mentioned are for the most part those which move readily only when rates are low. The increase in ocean rates following the outbreak of war greatly interfered with the industries producing some of these articles.

The leading manufacturing industries of the Pacific Northwest are the lumber and milling industries. During the first year of the war the exports of lumber from Washington and Oregon fell off about 50 per cent. The exports of lumber from the Pacific Northwest have in recent years gone principally to Australia, China, the west coast of South America, and to Europe. The secretary of the Pacific Lumber Bureau, an organization of Oregon, Washington, and British Columbia tidewater mills, recently made a report¹⁷ showing the shipments of lumber from tidewater points within this area and the distribution of these shipments. His figures cover the first nine months of the year 1916 and the monthly shipments during several preceding years. A comparison between the first nine months of 1914 and of 1916 shows the following:

Destination	1914	1916
	(<i>M feet</i>)	(<i>M feet</i>)
Australia	155,138	71,158
West coast of South America	72,618	44,684
China	111,537	32,834
United Kingdom and continent	32,069	57,053

The shipments to all these destinations except Europe were much smaller in 1916 than in 1914. Of the shipments to the United

¹⁶ *Commerce and Navigation of the United States*, 1914.

¹⁷ *Seattle Times*, November 26, 1916.

Kingdom and Europe a large part was made by rail across the continent for reloading on vessels at New Orleans, New York, and Boston. This routing was due to the scarcity of vessel tonnage in the North Pacific waters.

In ordinary years the flour exported from Puget Sound and Portland goes to China and Japan. Owing to the high prices of breadstuffs, the shipments of flour from the Pacific Northwest remained large during the first year of the war.¹⁸ The subsequent increase in rates and the more limited space offered by ocean liners have seriously handicapped the milling industry in this region of the country. One of the most prominent owners of flouring mills in the Northwest is quoted as saying:

War conditions—presented most prominently in the shortage of carrying bottoms and the high cost of grains—are making the flour milling industry one of many troubles at present. The scarcity of shipping facilities is affecting this industry probably more than any other. . . . There is plenty of flour available, however, at the market price. After the flour is manufactured transportation to carry it to the many highly developed markets is practically unobtainable.¹⁹

Flour shipped from Puget Sound to China is allotted on Japanese liners only two fifths of the space formerly allowed.²⁰ The balance must seek markets elsewhere or go on chartered vessels at much higher rates.

The lumber produced in the Northwest is marketed for the most part in states and countries bordering on the Pacific Ocean or in the Rocky Mountain and western Mississippi Valley states. Shingles constitute the only important wood product of this region that is sold throughout the United States. Practically all the wheat flour produced in Washington and Oregon is ordinarily marketed in the Pacific coast states and in the Orient. The Oriental after adding the ocean freight charges on flour to the price prevailing on the Pacific coast now finds that price prohibitive.

Hence, both the milling industry and the lumber industry suffer from a greatly restricted market due to a limited vessel tonnage operating between the eastern and western coasts of the

¹⁸ *Commerce and Navigation of the United States*, 1915. From Puget Sound the exports of flour increased in value from \$8,349,400 for the year ending June 30, 1914, to \$8,568,156 for the year ending June 30, 1915.

¹⁹ *Seattle Times*, March 19, 1917.

²⁰ Testimony of W. B. Henderson in Hearings before the Committee on Merchant Marine and Fisheries, House of Representatives, 64 Cong., 1 Sess., first series, pp. 794 and 795.

Pacific. It is true that wheat produced in eastern Washington, Oregon, and Idaho is shipped by water in large quantities to foreign markets, but this export wheat nearly all goes by way of the Panama Canal to Europe, and does not figure to any large extent in the trans-Pacific trade.²¹ On account of the depression which has prevailed in the lumber and milling industries, the Pacific Northwest has not been to any marked degree a participant in the "war prosperity" enjoyed by other sections of the United States.

Like conditions prevail elsewhere along the Pacific. Some months after the outbreak of the war the American consul at Victoria, British Columbia,²² stated that certain kinds of exports which usually pay the lowest freights and which cannot now be profitably shipped on account of the higher charges are being severely restricted. "The high freight rates and lack of ships have been responsible for quite a set-back to the lumber business, and much complaint is voiced by the lumber interests on that account." On the other side of the Pacific the depression of certain industries due to increased freight rates is a matter of widespread complaint. Throughout the Orient there is a clamor for space on vessels going to the United States and the United Kingdom. The rates on sugar and hemp from the Philippines to the United States were raised during the first year of the war from \$7.50 and \$15 per ton, respectively, to \$20 and \$45.²³ Nominal rates below the latter were quoted by conference lines, but shippers were notified that tonnage could not be provided.

On Chinese foreign trade the immediate effect of the European war was complete paralysis. Export trade, however, is not so vital a factor of economic life in China as in countries more highly developed industrially. The exports of this country consist of raw materials and products of the soil rather than manufactured goods. All the industries producing these commodities were affected, to the extent that they were dependent upon foreign markets, by the increase in ocean freight rates. But conditions rapidly readjusted themselves, and within a few months there began to spring up a demand for materials to be used in connection with the war and for articles formerly supplied to neutral

²¹ The writer has discussed the effect of changes in the price of wheat on the milling industry of Washington in an article in the *Political Science Quarterly*, September, 1909.

²² Daily Consular and Trade Reports, 1915, No. 54, p. 923.

²³ Daily Consular and Trade Reports, 1915, No. 95, pp. 386 and 387.

nations by the belligerent powers that were no longer able to furnish them. There was an increased demand for Chinese cotton, antimony, albumen, aniline dyes, indigo paste, egg products, hides, skins, straw braid, pig iron, wool, and silks. The abolition of the use of alcoholic drinks in Russia increased the demand for Chinese tea.²⁴ Most of these products, being of smaller bulk in proportion to value than many of the former exports of China, were able to bear the increased rates, and are now exported in large quantities to the United States as well as to European countries.

The effect of the reduction of shipping facilities in the trans-Pacific trade has thus been a depressing one on most industries producing commodities whose movement depends upon low or moderate rates. Where such industries dominate as they do in the Pacific Northwest there has been business depression.²⁵ Another, though subordinate, factor in this situation is the relationship existing between the transcontinental railroads of the United States and the transoceanic steamship lines. The latter usually favor large and regular shippers in the matter of rates and service. Regular shippers will secure space allotments in preference to those shipping at irregular intervals. The transcontinental railroads as regular shippers have an understanding with the Japanese lines for practically all their space. The local exporter has been left out of the deal, and hence must either go out of business or fall back on chartered vessels with their much greater advances in rates.²⁶

The predominant position of Japan in the trans-Pacific trade is apparently being utilized to foster her industries. The advances in ocean freight rates by the Japanese lines engaged in this service are noticeably different for commodities moving east and for those moving west. These advances are, in the main, on American freight moving to the Orient rather than on Japanese goods carried to America. In fact, the increase in rates on Japanese freight, while appreciable, has been slight compared with the rise in ocean

²⁴ Bureau of Foreign and Domestic Commerce, Miscellaneous Series, No. 44, p. 12.

²⁵ The wheat farmers of eastern Washington, Oregon, and Idaho have shared in the country's prosperity as have wheat farmers elsewhere. The high price of wheat in European markets enables wheat dealers in Tacoma, Seattle, and Portland to meet the high freight charges.

²⁶ Testimony of W. B. Henderson in Hearings before Committee on Merchant Marine and Fisheries, H. R. 64 Cong., 1 Sess., pp. 794 and 795.

transportation costs generally. In all advances of rates by Conference Lines on the Pacific the government of Japan, controlling the policies of the leading Japanese lines by the payment of subsidies, has prevented any very marked increase in rates on commodities in whose production Japan is interested.²⁷ In other words, these lines by virtue of the subsidies paid them are to control transportation charges in the interest of Japanese trade.

In the following table a comparison is made between the advances in quoted rates on some of the principal Japanese exports to the United States and some of the leading American exports to the Orient. While the published tariffs of steamship lines do not in all cases represent the actual charges imposed, they do serve as a rough index of what the shipper has to pay. In the case of freight moving east on the Pacific, the rates are those from the

TABLE 3.—FREIGHT RATES FROM JAPAN TO AMERICA.

Commodities	Before the war ¹	Effective April 1, 1916 ²
Silk (raw or spun) in bales . .	\$0.03 per lb. net	\$0.036 per lb. net
Silk goods, in cases	15.00 M ³ (+ $\frac{1}{2}$ % ad valorem)	18.00 M (+ $\frac{1}{2}$ % ad valorem)
Tea	5.50 M, net	6.60 M, net
Copper, in slabs	4.50 W	5.40 W
Copper, raw	3.00 W	4.00 W
Linen goods, provided declared value does not exceed \$900 per ton	7.50 M	9.00 M
Porcelain, with declared value not exceeding \$100 per 40 cubic feet	6.50 W/M	7.80 W/M
Camphor (refined) in tins . .	10.50 M	12.60 M
Camphor (crude)	8.50 M	10.20 M
Matting, in rolls	5.50 M	6.60 M

¹ Trans-Pacific Tariff Bureau (Japan Branch), Freight Tariff No. 3, Yokohama, May 15, 1913.

² Tariff of Nippon Yusen Kaisha, Effective April 1, 1916. Announcement of a further increase of from 20 to 30 per cent in some of these rates has just been made at the offices of the three Japanese lines (*Seattle Times*, April 17, 1917). The announcement, however, does not materially change the situation with reference to the rates on Japanese and non-Japanese products.

³ Ocean freight rates are usually quoted by the ton. The freight ton, however, may be a measurement ton of 40 cubic feet of space or a weighted ton of 2,000 pounds. If the former, the rate is often quoted as so much per M; if the latter so much W. If the option of using one or the other standard is left with the steamship company the quotation is often so much W/M.

²⁷ Commerce Reports, 1915, No. 243, p. 226.

Japanese ports of Nagasaki, Moji, Kobe, Yokkaishi, Shimidzu, and Yokohama to the American (including Canadian) ports of Victoria, Vancouver, Seattle, Tacoma, and San Francisco. In the reverse direction the rates apply to the American ports named, except San Francisco in the case of the rates effective November 2, 1914, and the Japanese ports of Yokohama, Kobe, Nagasaki, and Moji, the Chinese port of Shanghai, Hongkong, and Manila, P. I.

TABLE 4.—FREIGHT RATES FROM AMERICA TO THE ORIENT.

Commodities	Effective Nov. 2, 1914 ¹	Effective Dec. 1, 1916 ²	
		Yokohama, Kobe Moji, Nagasaki	Shanghai, Hong- kong, Manila
Cotton (raw), machine com- pressed	\$8 W	\$18 W/M	\$20 W/M
Machinery, single package not exceeding 4,000 lbs.	8 W	18 W	20 W
Iron and steel articles	4 to 10 W	20 W	20 W
Leather in rolls	15 W	15 M	18 M
Canned goods in cases	7 W ³	18 or 20 W ⁴	20 or 22 W ⁵
Grain and grain products (not including wheat and flour)	5 to 10 W/M	18 W/M	20 W/M

¹ Pacific Coast-Oriental Tariff Bureau, Freight Tariff No. 13. The rates in this tariff while higher than those prevailing before the war are still low compared with those of 1916 or 1917. The big advances early in the war were made by tramp vessels rather than by the regular liners.

² Pacific Coast-Oriental Tariff Bureau, Joint Tariff No. 14. The rates in this tariff apply to shipments from San Francisco as well as the more northern ports.

³ The rate to Hongkong and Manila is \$8.

⁴ If strapped at both ends, \$18; if unstrapped, \$20.

⁵ If strapped at both ends, \$20; if unstrapped, \$22.

The rate on flour which is one of the most important exports of the United States to Japan and China is not quoted in the general tariffs. Before the war \$5 a ton was considered a high rate to either of these countries. Early in 1917 a special tariff quoted a rate of \$15 a ton to Japanese and Chinese ports and \$17 to Manila.²⁸ Charter rates on flour were quoted at \$20 per ton to Japan and \$25 to Vladivostok.²⁹ Rates on lumber, which generally goes in chartered vessels or in vessels owned by lumber companies, are not quoted in the general tariffs. A special tariff pub-

²⁸ *Seattle Times*, Feb. 25, 1917.

²⁹ Letter at Seattle office of Bureau of Foreign and Domestic Commerce.

lished in February, 1917, gives a rate of \$25 per thousand board feet to Japan, China, and Manila. Before the war \$12 per thousand board feet was a common rate.³⁰

It will be noted that the advance in rates on commodities moving from Japan to the Pacific coast of North America has been relatively slight; on the articles quoted no advance was greater than 33 1/3 per cent.³¹ Raw silk, which in the fiscal year immediately preceding the war formed about 66 per cent of the value of our entire imports from Japan, shows an increase of only 20 per cent. Tea, which ranks next to raw silk in importance, and silk goods show the same percentage of increase.

On commodities moving from the United States and Canada to China and Japan there are few rate advances of less than 100 per cent between November, 1914, and December, 1916. On important articles of commerce the increase in rates is from 100 to 300 per cent. Because of the demand for vessel space the actual advances are in many cases greater than those indicated in the published tariffs. By November, 1914, ocean freight rates on the Pacific had shown material advances, and hence the total increase between the period immediately preceding the war and December, 1916, is greater than that shown in the above table. On flour the special tariffs show an increase of 200 per cent when carried by regular line vessels and a greater increase when moved by chartered vessels. The transportation charge on raw cotton advanced from 125 to 150 per cent between November, 1914, and December, 1916.

The difference in the upward movement of rates between commodities moving east and those moving west may be considered in relation to the westward diversion of traffic due to war conditions. As already pointed out, the exports from Puget Sound to Asiatic Russia have enormously increased during the past two years. Practically no freight at present moves from Asiatic Russia to the Pacific coast of the United States. The westward movement from Japan to Europe has also increased. On account of the preponderance of the westward over the eastward movement, the Nippon Yusen Kaisha has started a round-the-world service from the Far East to London via Hongkong, thence returning to the Orient via

³⁰ *Seattle Times*, Feb. 25, 1917.

³¹ The advance is greater in the case of some commodities than the quoted rates would indicate. Before the war the commodities enumerated, with the exception of raw silk, silk goods, and tea, were subject to a deferred rebate of \$1 per ton weight or measurement. This rebate, the writer was told, has been discontinued since the war began.

the Panama Canal and the Pacific coast of the United States.³² The company employs ten ships of 69,000 tons in this round-the-world freight service.³³

Notwithstanding the heavy westward movement of freight it can hardly be said that the relatively small advances in rates from Japan to the United States on the great Japanese liners are to be looked upon in the light of low rates for return cargoes. Aside from the heavy shipments to Vladivostok, from which little or no return freight is carried, the trans-Pacific traffic shows a larger movement from the Orient to the Pacific coast of the United States than in the reverse direction. Rates from Hongkong and Manila on line steamers not touching Japan have advanced almost as much as those on freight from America to the Orient.³⁴ With the exception of raw silk, whose transportation charge has increased from 3 to 4 cents per pound, the advances have been from one hundred to several hundred per cent.

The moderate increase in rates on Japanese products going on subsidized liners across the Pacific has the appearance of a conscious effort to foster by discriminatory charges home industries. The comparatively high rates on commodities destined for the Orient act as a sort of protective tariff, while the low rates on Japanese products combined with high prices in the world market practically amount to indirect bounties on her exports. With her predominant position on the Pacific Japan is apparently using her large mercantile fleet to increase her export trade and develop the industries serving this trade. The reduced allotment of vessel space for flour shipments from the Pacific Northwest to China, already referred to, is in accordance with this policy. It is commonly asserted and believed that this reduction is made in the interest of the milling industry of Japan which is gradually capturing the Chinese markets.³⁵

Discriminatory rates in favor of the country under whose flag a vessel sails are not uncommon. British vessels operating between New Zealand and New York and London have recently quoted lower rates on New Zealand products shipped to London than on those shipped to New York, although the latter port is nearer to

³² Commerce Reports, 1915, No. 220, p. 1370.

³³ *Ibid.*, p. 1371.

³⁴ Trans-Pacific Tariff Bureau, Hongkong, Local Freight Tariff, No. 2 A. Effective January 15, 1916.

³⁵ Testimony of W. B. Henderson before House Committee on Merchant Marine and Fisheries, H. R. 64 Cong., 1 Sess., pp. 794 and 795.

New Zealand and until April, 1917, was a neutral port entirely without the war zone. This discrimination in favor of London has persisted whether the vessel sails directly to New York and thence to London or to New York via London.³⁶ While this instance is a case of discriminatory rates on imports to a home port as against a foreign port more favorably situated, the protective effect is none the less apparent. In this illustration there is no conscious effort on the part of the English government to favor home industries. Japan, however, seems to have taken advantage of her position as the dominant carrier in the trans-Pacific commerce to develop her export trade in true mercantilistic fashion.

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³⁶ Commerce Reports, 1915, No. 281, p. 857. Note quoted rates on kauri gum.

THE EARLY REGULATION OF PUBLIC SERVICE CORPORATIONS

The regulation of public service corporations has assumed such importance in recent years that there is general disposition to consider it a modern method of securing justice between the public and corporations. A study of early public utility companies and the laws dealing with them warrants no such conclusion. The service of these companies to the public was recognized from the first and was given as one reason for granting charters. As early as 1784 Massachusetts lawmakers incorporated the proprietors of a bridge company because the bridge would be of "great public utility."¹ That the companies were looked upon to some extent as public benefactors, did not, however, grant them immunity from regulatory provisions. The early companies were, of course, comparatively simple, consisting largely of turnpike, canal, bridge, and ferry companies. Yet in the regulatory provisions concerning them are found the germs, if not the actual statements, of practically all our present methods of regulation.

The present machinery for regulating public utility companies is of course more extensive and adequate than what existed in the latter part of the eighteenth and the early part of the nineteenth centuries. The work is now usually carried on through public utility commissions. These began to be formed about the middle of the nineteenth century, but did not assume their present activities until a quarter of a century later. Only recently have state public utility commissions been formed, New York and Wisconsin almost simultaneously taking the lead. The movement has spread so rapidly that a majority of the states now have such commissions. The commissioners generally receive power from the legislature, which is either that of general supervision or an enumeration of special and particular powers. Provision is often made for judicial review. Salaries are paid by the political unit which the commission represents.

A commission of some form was generally used in supervising the early public utility corporations. Position on the commission was secured by appointment, but not all members were appointed by the same authority. Some commissions were temporary and others were permanent, while a limit was often placed upon the amount of time which could be allowed to the commission for its

¹Laws and Resolves of Massachusetts, 1784, ch. 53.

services. Instead of being recompensed directly from the public funds, as at present, the earlier commissioners were paid directly by the corporation.

In 1803 a New York law² incorporated a turnpike company and provided that the governor should appoint three commissioners to examine the road from time to time. Each commissioner was to be paid three dollars a day by the corporation but the inspection was not to exceed two days a month. An 1804 'turnpike law'³ provided for inspection on complaint. If the company or complainant was dissatisfied with the finding of one commissioner, appeal could be made to the whole board, whose decision was final. If unappealed, and the complaint was well founded, the corporation was to pay the inspector three dollars a day as well as three dollars to the complainant; if not well founded, the complainant was to pay the inspector. If appealed, and the complaint was still considered well founded, the corporation was to pay the complainant ten dollars. In 1806 a law⁴ provided that if the complaint was unfounded the corporation was to collect, at law, from the complainant the amount paid to the inspectors. In 1806⁵ provision was made for the appointment of appraisers and inspectors by the county judge. For the first service the judge was to receive one dollar from the corporation, likewise for the second unless the complaints investigated were unfounded, in which case the complainant was to pay the one dollar. Many of these provisions were incorporated in a general law in 1807 which provided for the appointment of commissioners to lay out the road⁶ and others to inspect it, both of which were to be paid specified amounts by the corporation.

Other states besides New York handled the problem in a similar way. In the Laws and Resolves of Massachusetts for 1804⁷ there is an act defining the general powers of turnpike companies. Provision was made for the legislature to appoint a committee to view the route proposed by the petitioners for a road. When a grant was made for a road, the court of general sessions of the peace within the county where the road was located was to appoint five disinterested freeholders who were to have the same powers

² New York Statutes, 1803, ch. 50.

³ *Ibid.*, 1804, ch. 90.

⁴ *Ibid.*, 1806, ch. 170.

⁵ *Ibid.*, 1806, ch. 50.

⁶ *Ibid.*, 1807, ch. 38.

⁷ Laws and Resolves of Massachusetts, 1804, ch. 125.

as committees appointed for laying out public highways. All the expenses of the committeemen were to be borne by the corporation. In 1806⁸ North Carolina gave the county court powers to regulate bridge companies within certain limits. Pennsylvania in 1783⁹ permitted ferries to be established subject to such regulation as the legislature considered best. By a law of Vermont, 1808,¹⁰ the judges of the supreme court were to direct the examination of a bridge company and could reduce tolls. In 1820¹¹ she gave the village selectmen broad powers in regulating a ferry. In 1817¹² Virginia conferred regulatory powers upon the board of public works but provided that the legislature might confer the same powers upon any other body.

These examples show that the principle of regulation was recognized from the beginning. In some cases new machinery was created while in others use was made of bodies already existing, such as legislature, courts, and selectmen. In taking note of some of the more specific forms which this regulation assumed, it will be convenient to classify present regulation into provisions for supervising—(1) franchises and officers, (2) valuation and rates, (3) security issues, (4) service and property, (5) accounts and reports—and then to examine these, noticing briefly the scope covered by each at present but more especially the early regulatory provisions that would fall in each class.

Franchises and Officers

One of the first duties which was placed on the public utility commission after it was formed was to select the location for railroads in accordance with the public utility. The regulation of granting and using franchises is often extended to the commission. Laws often contain regulatory provisions, such as prohibiting the capitalization of franchises, while provision is sometimes made for their purchase and termination. Penalties are frequently prescribed against officers for failure to make reports, for failure to produce books, for refusal to obey subpoenas and for granting concessions to commissioners.

In view of the importance now attached to the subject of the

⁸ Laws of North Carolina, 1806, ch. 14.

⁹ Laws of Pennsylvania, 1783, ch. 1042.

¹⁰ Laws of Vermont, 1808, ch. 63.

¹¹ *Ibid.*, 1820, ch. 113.

¹² Laws of Virginia, 1817, ch. 38.

length and termination of franchises, it is interesting to note the early provisions of this nature, their wide extent, and the number of ways in which franchises could be terminated. Massachusetts, in the general turnpike law of 1804,¹³ stipulated that a company could be dissolved if it appeared to the satisfaction of the legislature that the income had compensated the company for money expended together with 12 per cent interest. The property, in case of dissolution, was vested in the commonwealth and at the disposal of the legislature. Connecticut, in 1806,¹⁴ declared that upon neglect to make repairs the charter of the company was to be declared void. By a law of Maryland, 1801,¹⁵ when a road had been remunerated for its capital stock, together with 15 per cent on it and for all damages it had met, tolls were to cease forever. In 1803¹⁶ the legislature provided that all above 15 per cent received by a bridge company should be kept as a sinking fund to purchase the stock. A law the next year¹⁷ provided that if the profits of a turnpike company were more than 10 per cent the court was to receive the surplus and use it in purchasing the road. The general assembly could at any time after the completion of the road, one year's notice having been given to the company, pay the cost of the road with interest at 10 per cent whereupon the road would pass under the control of the legislature. In 1820¹⁸ New Jersey incorporated a canal company which could be taken over at the end of 50 years by paying the sum expended together with 12 per cent interest.

The earlier provisions in Massachusetts were less considerate of the companies. The law of 1784¹⁹ simply provided that at the end of forty years the bridge to be erected by the company was to revert to the state. Nothing was stated about a return or price: nor was there any such statement in the law of 1787²⁰ permitting the erection of a bridge which was to revert to the state in good repair at the end of seventy years. The road company incorporated by the state in 1796²¹ could be dissolved by the general court

¹³ Laws and Resolves of Massachusetts, 1804, ch. 125.

¹⁴ Acts and Laws of Connecticut, 1806, p. 717.

¹⁵ Laws of Maryland, 1801, ch. 23.

¹⁶ *Ibid.*, 1803, ch. 103.

¹⁷ *Ibid.*, 1804, ch. 51.

¹⁸ Laws of New Jersey, 1820, p. 55.

¹⁹ Laws and Resolves of Massachusetts, 1784, ch. 53.

²⁰ *Ibid.*, 1787, ch. 27.

²¹ *Ibid.*, 1796, ch. 5.

when it was satisfied that the tolls had paid expenses together with 12 per cent interest. Pennsylvania granted both perpetual and terminable franchises. In 1787²² a bridge company was formed, but at any time after the erection of the bridge, the legislature, if it considered a free bridge desirable, was to appoint three commissioners, who, with three appointed by the proprietors of the bridge, were to decide upon the amount to be given in payment. In 1793²³ an act vested the property of a bridge in the company or their heirs forever. A turnpike, granted in 1796,²⁴ could be purchased after twenty-five years for a sum determined by ten commissioners, five to be appointed by the legislature and five by the company. All profits above 15 per cent from the bridge established in 1798²⁵ were to be used as a sinking fund to redeem the bridge. When the toll from the road chartered by Vermont in 1799²⁶ amounted to the cost of the road with an annual interest of 12 per cent, the supreme court might dissolve the corporation and place the property at the disposal of the legislature.

Similar provisions are found in charters granted in the first quarter of the nineteenth century. Vermont, in 1808,²⁷ chartered a turnpike company but provided that when receipts had repaid expenditure with 8 per cent interest the corporation was to be dissolved and the property vested in the state. Virginia, however, granted perpetual franchises. The general turnpike law of 1817²⁸ provided that, in consideration of the expenses of the proprietors, roads with all tolls and profits were to be vested in the proprietors forever in proportion to their shares. This state even went further and declared the shares free from public tax. Provision was made, however, that if a road were out of repair for eighteen months the interest of the company in the road and tolls was to be forfeited forever. South Carolina, also, in one instance at least, because of the great cost to the proprietor, vested a road in him and his posterity forever.²⁹

Early provisions regarding franchises are not confined to the eastern states but are also found in laws of some of the middle

²² Laws of Pennsylvania, 1787, ch. 1302.

²³ *Ibid.*, 1793, ch. 1684.

²⁴ *Ibid.*, 1796, ch. 1873.

²⁵ *Ibid.*, 1798, ch. 1963.

²⁶ Laws of Vermont, 1799, p. 38.

²⁷ *Ibid.*, 1808, ch. 117.

²⁸ Laws of Virginia, 1817, ch. 38.

²⁹ Laws of South Carolina, 1810, p. 37.

western states. Illinois territory, in 1818,³⁰ chartered a navigation company. In consideration of the expense, the works and the profits from the enterprise were vested in the company for thirty years, but at the end of that time all title was to cease. During this period no tax was to be collected from the company. In 1819³¹ Ohio gave a charter to a bridge company for ninety-nine years. If higher tolls were charged, however, than those set forth in the schedule, the county was to have all rights of proprietorship. In 1817³² a turnpike company was incorporated, and it was provided that at any time the state or counties had a right to purchase the road for its cost plus 12 per cent. A law of 1819³³ authorizing a bridge company gave the county commissioners power to purchase the bridge, 6 per cent interest to be allowed.³⁴

The early provisions referring to officers and employees were not many; yet we find the possibility of such regulation recognized in a few instances. Maryland, in 1804,³⁵ provided that the court could require road repairs and if these were not made in proper time the president of the road was to be fined. Massachusetts, in 1780,³⁶ provided for a suitable person to collect toll who must be approved by the court of general sessions. He was to be fined for collecting more than specified toll. Delaware, by a law of 1815,³⁷ provided that a toll collector who demanded more than scheduled rates should forfeit twenty-five dollars. Maryland in 1801³⁸ made the penalty for a similar offense fifty dollars.

³⁰ Laws of Illinois Territory, 1817-1818, p. 4.

³¹ Ohio Laws, 1812, ch. 22.

³² *Ibid.*, 1817, ch. 13.

³³ *Ibid.*, 1819, ch. 13.

³⁴ A number of instances can be found where the rights of these companies reverted to the political unit. A careful study of the documents of different states and counties would doubtless show a large number. It seems the proprietors were not always willing to give up their rights. An example of this is the Charles River Bridge and the Warren Bridge at Boston. Here the proprietors resorted to litigation. A number of House Documents refer to this controversy, *e.g.*, No. 4, 1826 and No. 82, 1827. The laws of the state, 1823, p. 510 and p. 851 also refer to the controversy. The resolves of 1824, ch. 64 authorizes the ascertainment of the reversionary value of some bridges. A number of years later some states changed the provisions for purchasing roads. Ohio did this in 1878. (Ohio Laws, vol. 75, p. 1150.)

³⁵ Laws of Maryland, 1804, ch. 51.

³⁶ Laws and Resolves of Massachusetts, 1780, ch. 7.

³⁷ Laws of Delaware, 1815, ch. 35.

³⁸ Laws of Maryland, 1801, ch. 23.

Valuation and Rate Making

Valuation and rate making occupy important places in present regulation problems. Reasonable freight rates are required, with but little light on what "reasonable" means. "Value of service," "what the traffic will bear," and "cost of service" have been used as bases for rate fixation, the odds at present favoring the latter. Commissions are given power to deal with a large number of problems which arise concerning rates, while legislatures prescribe penalties for a long list of offenses. In allowing certain returns the value of the utility must be determined and as yet no general method has proved entirely satisfactory.

Inspection of the early laws reveals that the subject of valuation and rate making occupied a scarcely less important place then than at present. Most of the rates were fixed by schedule while they were often to be changed to allow a certain percentage return on the value of the property. Massachusetts as early as 1780³⁹ stipulated certain rates of toll for a bridge. In 1784⁴⁰ a bridge company was organized with a schedule of tolls to continue in force for forty years. Two bridge companies were incorporated in 1794.⁴¹ In the case of one the general court could change the rate of toll after twenty years; in case of the other after twenty-five years. In 1804⁴² she established a schedule of tolls for all turnpike companies.

Maryland, in 1804,⁴³ made provision that if at the end of two years the average profits had not been 10 per cent the tolls were to be increased until this return should be realized. By a law of 1807⁴⁴ the New Hampshire court was to so regulate tolls that net profits would be between 6 and 9 per cent. New Jersey, when incorporating a canal company in 1820,⁴⁵ required one fifteenth of all profits to be paid to the state whenever the return was more than 15 per cent on the capital. Pennsylvania laws of 1787, 1791, and 1792⁴⁶ incorporated a bridge company and two canal companies. Schedules of tolls were given which were to be revised if the return was more or less than a certain per cent on the capital. In

³⁹ Laws and Resolves of Massachusetts, 1780, ch. 7.

⁴⁰ *Ibid.*, 1784, ch. 53.

⁴¹ *Ibid.*, 1794, ch. 32 and 33.

⁴² *Ibid.*, 1804, ch. 125.

⁴³ Laws of Maryland, 1804, ch. 51.

⁴⁴ Laws of New Hampshire, 1807, p. 8.

⁴⁵ Laws of New Jersey, 1820, p. 55.

⁴⁶ Laws of Pennsylvania, 1787, ch. 1302; 1791, ch. 1577; 1792, ch. 1636.

1810, 1812, and 1819⁴⁷ Ohio incorporated bridge companies. A schedule of tolls was given in each case. In the first case any legislature could regulate the tolls after 1840; in the second, after fifteen years and once every five years thereafter; in the last case any legislature after 1840 could regulate the tolls. A Virginia law of 1808⁴⁸ allowed tolls to bring 10 per cent on the capital, while a law of 1817⁴⁹ permitted higher tolls during the first years of a company's existence. After fifty-one years, however, tolls could only vary so as to realize a return of from 6 to 10 per cent on capital.

Securities

The supervision of security issues is looked upon as one of the newer forms of regulation and the laws of some states are exacting in this respect. In some cases the mortgaging of public utility property is regulated; in others the purchasing and holding of stocks and bonds in other companies is supervised. Often consolidations can be formed only under the direction of a commission, penalties being prescribed for issuing stocks and bonds other than with its consent.

The security aspect of regulation did not assume an important place in early legislation. Trusts and combinations were unknown and there was no interdependence among companies. Yet even in the early laws are found germs of the policy that the state has a right to supervise a company's securities. Connecticut, in a general turnpike law of 1803,⁵⁰ stipulated that all expenses except for necessary and ordinary repairs were to be met by an increased capital stock. Even the three dollars a day paid to commissioners was to be raised in this way. By a law of 1805,⁵¹ however, no deficiency of interest could be charged to capital. North Carolina incorporated a bridge company in 1812⁵² and prohibited any person from subscribing to more than twenty shares within thirty years after the books were opened. Pennsylvania in 1792⁵³ forbade the increase of capital stock unless the authorized capital did not complete the canal chartered or unless it was injured through casualty.

⁴⁷ Laws of Ohio, 1810, ch. 65; 1812, ch. 22; 1819, ch. 67.

⁴⁸ Laws of Virginia, 1808, ch. 27.

⁴⁹ *Ibid.*, 1817, ch. 38.

⁵⁰ Acts and Laws of Connecticut, 1803, p. 636.

⁵¹ *Ibid.*, 1805, p. 691.

⁵² Laws of North Carolina, 1812, ch. 26.

⁵³ Laws of Pennsylvania, 1792, ch. 1636.

Service and Property

At present we are accustomed to a variety of regulations affecting the services and property of public utility companies. Some laws require particular appliances and equipment; others give commissions power to make such requirements. Penalties are prescribed for failure to carry out the various kinds of service requirements. The sale and lease of property is often supervised while damages to other property caused by a public utility company are assessed and awarded by commissioners. Additions, extensions, repairs, etc., are often required to be made to the existing plant.

Some provision concerning service to be rendered is generally found in the early laws which chartered turnpike and bridge companies. The right to collect tolls was frequently based upon the maintenance of a required standard of service. As early as 1796⁵⁴ Massachusetts placed a fine upon companies for unreasonable delay of travelers, while in 1802⁵⁵ she made the companies liable for all damages resulting from defects in the road. The general turnpike law of 1804⁵⁶ provided that a corporation should be fined if any person in its employ should collect more toll than allowed by law. If a road was not kept in good condition the county court could order the gates to be thrown open and no toll could be collected until a counter order was given. In 1797⁵⁷ a Connecticut law required the county court to inquire into any complaint as to the condition of the road. If the complaints were well founded tolls were to cease until a further order from the court. In the general law of 1803 the commissioners were required to carefully inspect the roads annually or more often if "they thought the public good required it." If they were not found in good repair the commissioners could order the toll gates thrown open until acceptable repairs were made. North Carolina, Rhode Island, and Ohio at later dates had similar provisions. North Carolina, in 1811,⁵⁸ made the proprietor liable for damages if he failed to keep the road in repair. No person was to be detained at any gate longer than fifteen minutes after he had tendered toll. Rhode Island in 1812⁵⁹ gave the justices of the county court power, upon com-

⁵⁴ Laws and Resolves of Massachusetts, 1796, ch. 5.

⁵⁵ *Ibid.*, 1802, ch. 34.

⁵⁶ *Ibid.*, 1804, ch. 125.

⁵⁷ Acts and Laws of Connecticut, 1797, p. 473.

⁵⁸ Laws of North Carolina, 1811, ch. 48.

⁵⁹ Rhode Island Public Laws, 1812, p. 155.

plaint which they thought well founded, to order the gates opened until proper repairs were made. Ohio chartered a bridge in 1812⁶⁰ stipulating that for every offense of not keeping it in repair the company was to forfeit five dollars.

Accounts and Reports

Regulation of accounting methods and securing reports of different kinds occupies an important place in the present relation of the public to utility companies. The Interstate Commerce Commission requires accounts and reports from the railroads. Some states make the same requirements for companies within the state; others prescribe systems of their own. Provisions are generally made for examining and auditing accounts under direction of commissioners, and specific forms are often required. Free access to a company's books is generally required, penalties being inflicted for mutilation of books or failure to keep them in the prescribed manner.

In the early laws no less emphasis was placed upon the right of the public officers to supervise accounts and demand reports. These provisions, as is true of most of the other regulatory provisions, were usually first found in laws dealing with specific companies. When a general law was enacted they were incorporated in it. That these specific provisions were made general is evidence that they accomplished the purpose for which they were intended. Here again Massachusetts was early in requiring such regulation. The act of 1780,⁶¹ which chartered a bridge company, required the proprietor to keep an account of the tolls received and exhibit this under oath to the court. A law of 1796⁶² required the books of the turnpike company chartered by it to be open at all times to inspection and examination by a committee appointed by the general court. The books were likewise to be open to the inspection of the governor at any time. A true account of incomes and dividends arising from tolls together with a statement of necessary disbursements was to be made annually to the governor and council. Practically the same provisions were incorporated in the general turnpike act of 1804⁶³ and in addition a statement of the cost of the road was required. Connecticut was even more specific, for in

⁶⁰ Ohio Laws, 1812, ch. 22.

⁶¹ Laws and Resolves of Massachusetts, 1780, ch. 7.

⁶² *Ibid.*, 1796, ch. 125.

⁶³ *Ibid.*, 1804, ch. 125.

1805⁶⁴ a law was passed entitled "An act to establish a uniform mode of stating and preserving accounts of turnpike companies." Commissioners were to be appointed to inspect the companies and to give the accounts to the state treasurer in such form as he prescribed and on the uniform blanks which he was to have printed. The amount of capital stock was to be stated in one account while the statement of repairs, expenses, and tolls was to be in another.

Other states were no less reticent in requiring similar provisions. New York in her general turnpike law, 1807,⁶⁵ required the corporation to file an accurate map of the road with the clerk of the county through which the road passed. Maryland, in incorporating a road in 1801,⁶⁶ required an annual statement of receipts and expenditures. For each neglect to make the return the company was to forfeit one thousand dollars. Pennsylvania chartered a canal company in 1791⁶⁷ which, at the end of every third year, was to lay before the general assembly an abstract of accounts showing capital expenditure, income and profits. The canal company chartered in 1798⁶⁸ was to give an abstract of accounts at the end of every six years for the five preceding years. Vermont chartered a bridge company in 1799.⁶⁹ At the end of twenty years the judges of the supreme court were to examine into the accounts of the company through an entirely disinterested person whom they were to appoint. He was to be sworn to the faithful discharge of his trust, to be empowered to call before him and examine under oath any person he desired, and was to make out what he considered a fair statement of the cost of erecting the bridge as well as the proceeds arising from tolls. Another company chartered the same year⁷⁰ was ordered to lay all accounts before the legislature at the end of every fifteen years. A bridge company formed in 1808⁷¹ was to be examined by the court representatives at the end of eight years and at the end of every five years thereafter.

Some years later other states enacted laws of a similar nature. North Carolina⁷² chartered a canal company in 1811 and at the

⁶⁴ Acts and Laws of Connecticut, 1805, p. 691.

⁶⁵ New York Statutes, 1807, ch. 38.

⁶⁶ Laws of Maryland, 1801, ch. 23.

⁶⁷ Laws of Pennsylvania, 1791, ch. 1577.

⁶⁸ *Ibid.*, 1798, ch. 1963.

⁶⁹ Laws of Vermont, 1799, p. 59.

⁷⁰ *Ibid.*, 1799, p. 38.

⁷¹ *Ibid.*, 1808, ch. 63.

⁷² Laws of North Carolina, 1811, ch. 25.

end of every twenty-five years she required a sworn statement of tolls for the preceding years. Another company chartered the same year⁷³ was to make a sworn annual statement to the superior court of all receipts and expenditures. Delaware required a road company chartered in 1815⁷⁴ to give an abstract of accounts every third year for ten years; after that an abstract at the end of every ten years for the preceding three years. Virginia required the turnpike company incorporated in 1817⁷⁵ to make a report at the end of the first year of the amount of stock expended, expenses, and toll received, while a similar report was required at the end of every three years. The board of public works, to which the report was to be made, was to prescribe the form of the report and determine how it was to be verified. Ohio required the turnpike company chartered in 1817⁷⁶ to keep account of expenses and receipts. Books must be always open to the inspection of the county commissioners or an agent appointed by the legislature. A refusal to exhibit books forfeited all rights conferred by the act. An act in 1819⁷⁷ required a bridge company to keep and file expenses with the county commissioners. When New Jersey incorporated a canal company in 1820⁷⁸ she demanded at the end of twenty years and at the end of every ten years thereafter an account of profits and expenditures to be given to the legislature. Books, papers, and transactions after twenty-one years were at all times to be open to the inspection of the state treasurer or any one appointed by the legislature.

From this review of the legislation by which public utility companies were formed before 1820 it can be seen that regulation existed at even this early date. In fact, regulation and the public utilities have grown up hand in hand. At first the regulation was simple, but the operations of the companies were simple also. As the companies became more extensive, regulation, even in these early years, branched out into new fields, and was of such character that it naturally conforms to a classification of present-day methods. Only in the agency of the regulation and in the method of remuneration has there been marked change. Instead of a special

⁷³ *Ibid.*, 1811, ch. 48.

⁷⁴ Laws of Delaware, 1815, ch. 45.

⁷⁵ Laws of Virginia, 1817, ch. 38.

⁷⁶ Ohio Laws, 1817, ch. 13.

⁷⁷ *Ibid.*, 1819, ch. 67.

⁷⁸ Laws of New Jersey, 1820, p. 55.

commission to look after each corporation, a state commission now supervises all the public utility companies in a state. Remuneration of commissioners instead of coming directly from the corporation, is now paid from public funds. This is generally more than equalled, however, through greater taxation, so in the end the results are the same. Regulation, then, cannot properly be called a modern method of handling the public service corporation, for it is simply the extension of a system which began with this class of corporation and the application of it to meet the different phases of the problems arising out of the peculiar relationship of public utilities to the state.

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THE PRICE PROBLEM IN THE LUMBER INDUSTRY

Many of the most important issues with respect to the prices of the basic raw materials of industry and to the wise control of natural resources generally are exemplified in the lumber industry. These are live subjects. Competition in many American industries has been virtually suspended under the war conditions. To the problem of prices is therefore added the problem of adequate control. Professor Stephens' interesting article in the *AMERICAN ECONOMIC REVIEW*¹ is timely. So pointed is the analysis of price determinants that one wishes that the more complete facts concerning the price situation which the writer has there depicted might have been in his possession.

So complex is the lumber price mechanism that it defies brevity in its analysis. The sins of over-capitalization, the perils of borrowed capital sunk in a speculative enterprise, the consequences of an exceptional degree of decentralization are all to be considered. Influences peculiar to natural resources as a class are present; still others peculiar to standing timber alone. With them all are the general influences affecting the prices of all commodities in the same direction and tending, other things being constant, in the long run, to affect them equally.

The isolation of the specific effects of specific influences, difficult at best under the most simple conditions, is many times more difficult in the analysis of lumber prices. To this end Professor Stephens' article is illuminating. It is essentially a review of the present writer's book on *The Organization of the Lumber Industry*.² In this book attention is directed to the price problems fundamental in the consideration of public policy with respect to standing timber, and a convenient method of price analysis is outlined. But Professor Stephens' flattering estimate of it does not perhaps indicate adequately that reasonably close approximations are the best that may be expected. In abstracting from the total movement of lumber prices that proportion which has been due either to influences peculiar to lumber or to general influences operative upon lumber prices to an unusual degree, no modest assumption with respect to *facts* is required. The assumption that the total movement of lumber prices over a given period, in so far as it has been, in respect both to direction and relative amount,

¹ G. A. Stephens, "Determinants of Lumber Prices," *THE AMERICAN ECONOMIC REVIEW*, vol. VII, no. 2 (June, 1917), pp. 289-305.

² Chicago: American Lumberman. 1916. Pp. x, 153.

the same as the movement of general prices, has been due to *general* influences affecting all commodity prices and not to specific influences affecting lumber only, is proper food for the analysis to which Professor Stephens has subjected it. This assumption has the merit of a convenient working basis as closely corresponding to the facts as available information will allow. Although Professor Stephens in his review has not distinguished between a working assumption and a statement of fact, the present writer and the student of the lumber industry may be grateful to him for the added proof his careful analysis gives of the essential correctness of the basic assumption of the book with respect to general price influences in their relation to lumber prices. This is the more for the reason that the same method and the same assumption may be used and is now being used by public agencies in the study of other natural resources.

The recent article is illuminating with respect to many important aspects of lumber price fixation. But many significant facts appear to have been overlooked and others apparently misconstrued. The present writer, although desiring to promote a complete and accurate statement of an instructive price situation, is nevertheless not disposed to enter a controversial field where, in the absence of facts, opinion is balanced against opinion. The brief space available for this purpose admits of but the most meager exposition. Many matters must therefore remain untouched.

I

The lumber manufacturing industry has long had the attention and study of public agencies. The chief public interest attaches to it as the virtual administrator of the nation's resources of standing timber. From unhealthy competitive conditions, largely the result of defective organization and unwise financing of investments, the industry first sought self-relief through trade agreements, formal or informal, and under varying guise. But this search was comparatively fruitless and was discouraged from within and repressed from without. Since 1907, with the exception of the past few months when under war conditions a shortage of labor and of transportation facilities has caused a virtual suspension of competition in the sale of lumber in many regions of the United States,³ the lumber industry has shared but little in the

³ The production at the mills has apparently not declined substantially if at all. But a considerable proportion of the output is not reaching the market

general increase in prices. The highest prices during this ten-year period were in the second quarter of 1907, the first quarter of 1913, and the first quarter of 1916. The lowest prices occurred during the second quarter of 1908 and the second quarter of 1915.

A comparison of these extremes of price in percentages of a base price of 100, which is the average price for the first three quarters of 1907, is shown in the following table.⁴ The species included constitute nearly 90 per cent of the annual cut of softwood lumber. Hardwoods are not included. They are relatively much less important and the prices of them present in large part a separate problem.

RELATIVE PRICES OF LUMBER BETWEEN 1907 AND 1916
Basis: F. O. B. Mill.

Species	Year	1907	1908	1913	1915	1916
	Quarter	2	2	1	2	1
Southern Yellow Pine		103.4	58.0	107.3	78.2	108.9
North Carolina Pine		102.3	88.1	127.3	95.9	115.8
Douglas Fir		101.3	77.3	89.7	58.6	86.8
Northern Pine		100.9	94.6	104.9	99.9	103.4
Hemlock		102.1	77.2	101.1	89.6	101.2
Cypress		100.4	89.2	97.7	91.2	(²)
Western White Pine		(¹)	(¹)	107.3	102.8	110.7
Western Yellow Pine		(¹)	(¹)	100.8	85.7	96.0

¹ Prices not available for period prior to second quarter of 1909. For this quarter the relative price of Douglas fir is used for both species of western pine, namely, 81.6.

² Prices not available.

During the same period general commodity prices,⁵ on a base similarly computed, moved as follows:

	1907	1908	1913	1915	1916
General prices	100.	97.8	106.7	107.5	132.8

where it may come into touch with, and be balanced against, the demand. The present prices are therefore in a measure fictitious. When normal transportation conditions reassert themselves this situation will doubtless disappear.

⁴ These relative prices are based on a representative average for each species of prices of actual sales of lumber by identical mills throughout the period or by mills in substantially similar situation in the same region.

⁵ Adapted from Index of Relative Prices of Bureau of Labor Statistics.

Lumber prices, it is apparent, have greatly lagged behind general prices during this period. At the same time the proportion of the total output of lumber which has been cut in each lumbering region has remained practically constant, *i.e.*, about 24 per cent in the Pacific States and Montana and Idaho, including chiefly Douglas fir and the western pines; about 45 per cent in the Southern States, including chiefly southern yellow pine, North Carolina pine and cypress; about 15 per cent in the Lake States and the Eastern States, including chiefly northern pine and hemlock. The remainder of the output is almost exclusively hardwood in the central hardwood region. It is obvious, therefore, that the most important facts with respect to lumber prices concern the softwoods of the South and the West. These two groups of softwoods, moreover, constitute more than two-thirds of the total supply of merchantable standing timber of all species in the United States.

To complete the preliminary picture of the lumber price situation it is necessary to compare the facts above shown with those of the period preceding 1907. General commodity prices in terms of gold dollars in 1900 were approximately the same as they had been in 1860. But during the intervening period the average prices of lumber, at the mill, increased more than 150 per cent. Lumber was becoming a much more important article of interstate commerce and the markets secured their lumber supplies from mills increasingly distant. Between 1890 and 1907 general prices increased 14.6 per cent and lumber prices 94 per cent. The outstanding facts, therefore, of the period prior to 1907⁶ are: (1) The great increase in lumber prices as compared to general prices, and (2) the constantly increasing proportion of the lumber output which was manufactured in the regions most distant from the chief consuming centers. Contrasted with these are the analogous facts for the period since 1907, namely: (1) The substantial decline in lumber prices as compared to general prices, and (2) the almost uniform relation maintained between the quantities of lumber produced in the different regions.

⁶The year 1907 marks the point of maximum total production of lumber in the history of the lumber industry in the United States, *i.e.*, 46 billion feet as against approximately 440 billion feet in 1916. Increasing substitution of other commodities for lumber, replacing within the last 10 years the equivalent for nearly 8 billion feet of lumber, is one of the main causes underlying the recent decline in the demand for lumber. But on the other hand the high prices for lumber prevailing before 1907 were probably chiefly responsible for the increased substitution.

II

The panic of 1907 was followed by a severe reaction in lumber prices, as has been shown in the table above. To a substantial degree the ordinary demand for softwood lumber is a joint demand. The activity of this demand depends in large measure upon industrial activity generally. As Professor J. M. Clark⁷ has recently pointed out, the changes in the demand for finished products are reflected back to more extreme and more sudden variations in the demand for the "means of production" of such finished products. The case of structural lumber is an illustration in point. The great temporary fluctuations in lumber prices, such as have been shown, are not therefore without substantial explanation.

In view of the following facts, the statement by Professor Stephens that "The demand for lumber is unusually elastic, quickly responding to changes in both price and industrial conditions"⁸ requires consideration from an angle different from that from which he has approached it. The joint character of a great part of the demand for lumber has apparently been overlooked. To say that the demand for lumber is quickly responsive to changes in industrial conditions means that the demand for lumber responds quickly to changes in the demand for those commodities to the production of which the lumber is only a single intermediate instrumentality. But such responsiveness is by no means indicative of an elastic demand for lumber. When, for example, factory products are in great demand, structural lumber is likewise in demand for factories and repairs. And this is true in large measure irrespective of the price of the lumber. To the extent to which the demand for lumber is a joint demand it is not responsive to changes in price and as compared to the demand for commodities generally it is inelastic, not elastic.

This fact is recognized throughout the lumber trade and is one of the greatest causes of perplexity to the lumber manufacturer or dealer in his effort to maintain stable prices with a reasonably uniform volume of sales. The present writer has been repeatedly told by manufacturers, especially by dealers, and, with respect to certain important classes of trade, "I cannot sell a stick more by reducing my prices and I sell just as much by keeping my prices up." Such expression, although doubtless an exaggeration, is

⁷ Business Acceleration and the Law of Demand: A Technical Factor in Economic Cycles, *Journal of Political Economy*, March, 1917.

⁸ Stephens, *loc. cit.*, p. 304.

significant of the basic fact in the experience of the industry. Were the demand for lumber elastic, one of the most troublesome faults in the organization of lumber distribution could be corrected.

But the inelasticity of the demand for lumber is not confined to the field of joint demand (although the line of demarcation of that field is difficult to draw). Many of the most prominent southern lumbermen have asserted to the present writer that if they could only reduce by 2 per cent the average yearly cut of southern yellow pine lumber, year in and year out, they could prevent the extreme fluctuations in prices such as those depicted in the above table. This, if true, means that decreases as great as 30 per cent in the average price could have been counteracted by a 2 per cent decrease in stocks. Numerous facts tend to confirm this contention in substance, although the proportionate decrease in stocks required may perhaps have been underestimated by overzealous advocates of a particular remedy for the disease of the industry. But during 1915, in a single marketing territory in the Southwest, an increase accumulated in yard stocks of but little more than 1 per cent was accompanied by a decline of more than 10 per cent in price. Similar instances have been noted. They are not conclusive of inelasticity of demand. But they are confirmatory evidence of it.

Between the second quarter of 1907 and the second quarter of 1908 softwood lumber prices generally fell almost 40 per cent. General prices fell less than one-half as much. The production of lumber likewise declined during the period more than 10 per cent. But despite the great proportionate curtailment of lumber output of the entire country a recession in price of 45 per cent in the case of southern yellow pine and of nearly 30 per cent in the case of Douglas fir was necessary to enable the market to absorb the offered stocks. Such characteristics are not those of a commodity for which the demand is highly elastic. It is to be noted, moreover, that the heaviest buying recorded in the lumber industry occurred from 1905 to 1907, during which the prices of softwood structural lumber increased nearly 50 per cent on an f. o. b. mill basis. During the same period there was almost unprecedented industrial activity generally.

III

But another important factor is to be noted in relation to the demand for lumber, namely, the changes in the national habit of

inordinate lumber consumption. This may be illustrated by the following comparison of the per capita utilization of lumber in representative states and foreign countries in feet, board measure:

Montana (1915)	1,234	Germany (1913)	150
Oregon (1915)	714	England (1914)	102
Pennsylvania (1915)	293	France (1914)	90
New York (1915)	206	Canada (1909)	468
United States (1915)	375	United States (1909)	485

This indicates, with respect to the United States a relatively heavy demand in the early stages of development (as exemplified by Montana) for lumber largely, it may be assumed, for structural purposes or for other uses requiring chiefly rough lumber. With the filling up of the "silent places" of the West and with the more gradual subsequent agricultural and industrial development (as exemplified in Pennsylvania or New York) the relative demand for lumber for the uses which formerly were the most important has much declined.

An increasing proportion of the new demand for lumber now being developed by the organized trade extension campaigns of lumber manufacturers is for stock requiring a greater average degree of refinement and a greater specialization of manufacture. Specialties are in growing demand. It is possible that with respect to these the demand is more elastic, a decline in price stimulating a greater than proportionate increase in buying. But this feature characterizes only a small part of the total lumber situation and is confined in large part to hardwoods. The great bulk of softwood structural lumber still encounters a relatively inelastic demand. A slight relative overproduction regularly has resulted in a great decline in price. This fundamental characteristic of lumber prices is one of the most decisive factors to be considered in the determination of a public policy whereby a stable condition of the lumber industry may be maintained.

IV

As bearing again upon the principles of lumber price fixation by the ordinary forces of the market, the following statement on cost and prices calls for consideration:

So preponderant, indeed [about 80 per cent], is the wage factor in lumber manufacturing, that were other factors in all industries to remain stationary and labor costs to increase in like percentages, total costs would increase relatively more in lumber manufacturing than in

the average of other industries, *resulting, other things equal, in relatively higher prices.*⁹

The actual proportion of the wages item in manufacturing cost is much less than is often asserted by lumbermen. Usually inadequate depreciation or none at all has been charged to cost in the manufacture of lumber. Frequently general expenses are not added, and the "manufacturing cost" spoken of often includes only the *specific costs* of the logging, milling and yarding operations. But the "overhead" in lumber manufacture is relatively large, and in the use of powerful labor-replacing machinery the actual "depreciation" is heavy.

The labor element, although preponderant, is generally much less than 80 per cent of the total cost. For example, the proportion of wages in total cost of operation only (*i.e.*, including no charge for the standing timber used), from stump to mill yard, for several representative mills in important regions, was as follows:

Southern yellow pine region (1914)—for 62 mills, 56 per cent.

Douglas fir region, Pacific Northwest (1913)—for 8 mills, 51 per cent.

Inland Empire—Idaho, Eastern Washington and Oregon (1914)—for 22 mills, 50 per cent.

California redwood region (1914)—for 11 mills, 47 per cent.

The lumber industry is the largest employer of labor in the United States, but the relative importance of the wages element in costs has been often exaggerated. More important, however, in the excerpt quoted above is the statement that "were other factors in all industries to remain stationary and labor costs to increase in like percentages," this situation would result in relatively higher prices for lumber. Such a situation has frequently existed in parts in the lumber industry without this result. Sharp competition between different manufacturing regions frequently, if not usually, in normal times has prevented any corresponding increase in lumber prices to compensate for the increase in labor cost. Allowing for differences in the efficiency of the average wage-earner in the lumber industry, the increase in labor cost since 1890 has been not less than 60 per cent in the woods and not less than 50 per cent in the mill per thousand feet of lumber produced.

Up to about 1907 the steadily increasing relative demand for lumber made possible the shift to the consumer of much more than the average increase in labor costs. But from 1907 to 1916, as we

⁹ Stephens, *loc. cit.*, 290. Italics are mine.

have seen, lumber prices generally did not show a net increase. Nevertheless, labor costs per unit and total manufacturing cost substantially increased. In recent years these have increased rapidly. The general result of this situation was for a few years a decline in the manufacturing profits as such. But beginning in the latter part of 1913 the standing timber, the raw material of lumber manufacture, began to share more heavily in the effect of the almost steady decline in the margin between cost and selling price. The prices of standing timber began to decline for the first time in the history of the lumber industry. Timber owners having hundreds of millions of dollars invested in standing timber found the stumpage market dull and unreceptive. Timber investments came into comparative disfavor among bankers and investment houses because lumber prices were no longer rising and because conversion into lumber was the sole means of liquidating such investments.

Haste to liquidate an unpromising investment was thus only stimulated. This resulted in still greater relative overproduction, and by the middle of 1915 lumber prices generally were almost as low as they had been after the panic of 1907. Seeing the profitableness of the great investments in raw materials threatened, and a more wasteful use of standing timber impending, a vigorous appeal was made to the government to provide some practicable method whereby, consistent with the public interest, production could be controlled, the undue waste of natural resources prevented, and the investments in standing timber protected.

How is this chain of events to be correlated with the connection above stated¹⁰ to exist between labor costs and lumber prices?

¹⁰ Stephens, p. 290; see p. 588 above. The same assertion from a slightly altered angle is made, *ibid.*, p. 291:

"Wages in the lumber industry increasing at approximately the same rate as general wages, efficiency of labor declining, and the wage cost proportionately larger than in other industries—*such a complex should constitute a material cause for the relative increase in lumber prices.*" (Italics are mine.)

In addition to the doubtful relation stated between cost and price is here to be noted the fact that during nearly ten years since the panic of 1907 there has been no relative increase in lumber prices but, on the contrary, a relative decrease despite a substantial increase in the labor cost per thousand feet of lumber. The situation prior to this period is adequately explained, on the supply side (which is here under review), by the relative exhaustion of nearby timber, by rapid increases in the average distance from the market of the main sources of lumber supply, and by the changes caused thereby in conditions of competition between regions. (See Compton, *The Organization of the Lumber Industry*, p. 113.)

Have the increasing labor costs, all other things being equal, resulted in higher lumber prices? It is true that the condition proposed, namely, that other things be equal, is not to be found in the study of economic relations in industry. The equality of other conditions must therefore be assumed. The merits of this assumption have been already discussed. Obviously, if this assumption be made, the increased labor cost in lumber manufacture has been at the expense either of (1) the consumer, in higher prices, or (2) the manufacturer, in smaller operating profits, or (3) the owner of timber, in a decreased realization upon his stumpage. The facts shown above with respect to lumber prices are indicative that during the entire period since 1907 there has been, generally speaking, no increase in prices.¹¹ During the same period operating profits have declined and likewise the realization on stumpage.

That these increases in cost have been at the expense of the investments fixed in operating plant and in raw material, and not at the expense of the public, is one of the most important features of the present situation in the industry. It is indeed the central objective fact wherein lies, in large part, the crucial public question as to the conservative use of the nation's standing timber. Unprofitable industry and conservation are incompatible in practice. If increased costs cannot be shifted, the investment, the profitableness of which is thus circumscribed, naturally becomes relatively unattractive, and the owner may be expected to liquidate his investment in favor of a more profitable enterprise as fast as the price of lumber will permit. Such pressure for early conversion of standing timber has caused much waste.

V

It is the chief remaining task of this paper to explain why, under conditions that have existed in the lumber industry, increased

¹¹ It is to be noted that the recent increase under abnormal circumstances is not included in this statement. This increase beginning about November, 1916, has been due primarily to an acute car shortage. Competition in the sale of lumber has been virtually suspended in many parts of the country. For example, certain grades of southern pine have recently (June) been sold on an f. o. b. mill basis of \$25 per thousand feet. At the same time other manufacturers less advantageously situated with respect to present shipping facilities, although normally experiencing no trouble, are offering similar stock at \$15 to \$17 per thousand feet *at the mill* to any one who will himself provide shipping facilities therefor. Price fixation under such conditions has no connection with the cost of manufacture.

costs generally have not been shifted. The standing timber, a raw material limited in supply, has been in the long run the all-absorbent of all special *advantages* with respect to price. It is likewise the ultimate resting place of the effects of the special *disadvantages* peculiar to the lumber industry. This is not an unfamiliar phenomenon in industry, but rather the contrary.

This situation is easily explained. Stumpage, labor, working capital in the broad sense, and the agent discharging the enterpriser's function, however it be designated, are the productive agents coöperating in the production of lumber. The wages of labor (since generally speaking no special initial skill is required), the return to the working capital and the reward to the enterpriser are in the long run fixed by competition between industries, and under similar conditions these shares cannot for a long period greatly vary as between such industries competing for labor, capital, and enterpriser's skill. The value of steel equipment, for example, depends only in very small part upon the use of steel equipment in lumbering operations. But the standing timber has virtually no commercial value except to the extent to which it shares in the price paid for the lumber products into which it is converted. Furthermore, the physical amount of standing timber, which is a natural resource, does not depend upon its price. Still more important, the *effective supply* of timber, *i.e.*, the quantity of timber actually offered for conversion into lumber at any time, is now and for a considerable time in the future will be virtually independent of the price which may be secured for it.

What is the reason for this apparent contravention of economic principle? In part the condition has been a consequence of the arrant speculation characteristic, until recent years, of timber investments, resulting in much over-capitalization of timber holdings. Obviously, whether the price be high or low, the timber sooner or later will be proffered for conversion into boards. As will be shown later, the existing conditions in timber holding are forcing and promise so to continue to force timber upon the market currently, irrespective, in large measure, of the desire to withhold on the part of the owner, and within certain limits irrespective of the price of lumber. The other items of cost derive their market value from several sources. But standing timber derives its value in the last analysis only from the value of the lumber into which it may be converted. Standing timber, the beneficiary in the long run of unusual prosperity in the lumber industry, is likewise the

victim of the industry's adversity. This is why the success of forest conservation in the United States is dependent fundamentally upon the prices of lumber.

VI

There are many other generalizations in Professor Stephens' article to which I would give greater consideration if space permitted. Some of these are matters of opinion. They can be settled only by facts which, on many points raised, are not available. To attempt to find in the lumber industry as now organized the concrete illustration of simple principles of economic action is at best to encounter serious obstacles. The chain of expected sequences is frequently broken because of some defect in the organization of the industry itself. The presence of such defects constitutes the basic challenge to wise public policy in the administration of the nation's natural resources. Were they not present, the most difficult problems would vanish. To squint at them or to evade them is at the expense of a complete and fair picture of the industrial situation. But such completeness cannot be achieved within the brief compass of this paper.

It may be seriously questioned whether, as a matter of fact, concentrated or decentralized ownership of standing timber under certain existing conditions has had the greater tendency to cause actual withholding of timber from the market or from the saw. It is admitted by Professor Stephens¹² that "It is only as it [concentration] affects withholding [of timber], that it becomes a price-determining factor."

It is of course true that concentration of ownership makes monopoly more possible than does decentralized holding. On the other hand, the difference must be observed between present withholding of timber such as would arbitrarily affect present prices and concentration of holding such as may in the future develop into a substantial restraint provided certain conditions shall then exist. Moreover, concentration is a question of degree, and what is considered concentration in the holding of timber would not be so considered in many other industries. What is now probably the largest private holding of timber in the United States is that of the Weyerhaeuser Timber Company, situated mostly in the State of Washington. There are also other large, but smaller holdings. The total standing timber in the state in 1916 was approximately

¹² *Loc. cit.*, p. 296.

375 billion feet, which was being cut at the rate of nearly 1.2 per cent each year. Large holdings are, with the possible exception of California, more characteristic of the state of Washington than of any other state in the Pacific Northwest, where stands more than half of the total remaining timber of the United States.

In the adjacent state of Oregon there are approximately 530 billion feet of standing timber. But there are more than 24,000 individual holdings and only a relatively small number of large ownerships. The average quantity of timber in each holding is therefore but little more than 20 million feet, and a large proportion of these holdings are not compact. On the contrary, different tracts hundred of miles apart may be found in common ownership. Here is a case of decentralized holding by individuals most of whom are not lumbermen or financiers but lawyers, school teachers, and preachers who had been induced to "speculate a little." Oregon timber is generally of the same species as Washington timber, and is held by many competent wood technologists to be of even superior quality. But the timber is being converted into lumber at a rate of only .4 per cent each year, or only one-third as rapidly as the timber in the state of Washington.

Undue concentration, to be sure, "squints in the direction of monopoly," but whether concentration is or is not "undue" depends in considerable degree on the relation of the size, location, and compactness of the holding to the needs of economical operation in lumber manufacture. As a rule, in the Pacific Northwest the maximum of economy in manufacture has been secured by mills cutting from 25 to 40 million feet of lumber per annum. And the most economical lifetime of the average operation is about 20 years. If 25 million feet be taken as the minimum capacity of efficient mills, the average timber holding in Oregon constitutes less than a single year's supply. Furthermore, it may not be compact.

The great Weyerhaeuser Timber Company holding, on the other hand, is supplying the raw material not only to the two large sawmills of its affiliated Weyerhaeuser Lumber Company, but in whole or in part also to nearly a score of other lumbering operations in the state of Washington alone.

These two cases mark the extremes of decentralization and concentration respectively. The small holdings in Oregon under present conditions are much more a cause of actual restraint than is the Weyerhaeuser holding. The former cannot support an operation. Because of the general overcapitalization of standing timber

and of the failure to materialize of the overconfident hopes of many timber owners, both large and small, the demand for stumpage has much lessened, and the average price, as attested by current transfers, declined about 10 per cent between 1913 and 1916. Under these conditions the small owners of timber in Oregon who cannot manufacture at a profit on their own holding also cannot sell out to timber speculators because the speculative demand for timber has almost disappeared. Furthermore, the annual producing capacity already installed in the United States for the manufacture of lumber is nearly two and one half times as great as the largest output ever recorded. To install new mills on these small holdings would only add to the constant threat of overproduction and increase the degree of idleness of the sawmills taken as a whole. So these small holders cannot sell to actual operators either, since the operating capacity is already so much in excess of the need of the industry. These small holdings, therefore, in the present nature of things, cannot be sold (unless at a financial sacrifice disproportionately great). They cannot profitably be converted into lumber, because of the superior efficiency of the larger operations. They cannot be pooled into compact groups convenient and practicable for operating purposes, both because the law interposes obstacles and because of the vicarious nature of most of the ownerships. Under these conditions the withholding of timber is inevitable although unwilling.

Meanwhile many of the larger holdings also are being withheld from the market and from the saw in the manner described by Professor Stephens.¹³ This is especially true in California, where there are only 22 milling plants steadily sawing redwood. These have had a total output during each of the past five years of less than 500 million feet, but the total amount of merchantable red-wood timber in private ownership is nearly 100 billion feet. Hundreds of holdings, many of them large, are as yet unoperated. The same situation prevails in many other lumbering regions. On the other hand, many of the largest holdings are the ones that are contributing the greatest proportionate amount to current manufacture. Some of them are being divided and compacted according to the needs of efficient operation.

The ownership of standing timber, which was formerly the chief source of profit to the lumber industry, has in a large measure, at least in the Pacific Northwest, become substantially an industrial

¹³ *Loc. cit.*, pp. 296, 297.

burden. Private ownership undertook a tremendous load in attempting to carry four fifths of the nation's timber, equivalent to nearly sixty years' supply at the present rate of cutting, even allowing for no new growth of merchantable timber in the meantime. Speculation has inevitably characterized the whole enterprise. It was unavoidable because of the uncertain future for lumber. But speculation has practically driven conservative capitalization out of the timber investment field. The result has been that prices as high as \$2.00 to \$2.50 a thousand feet have been actually paid for western timber which in all probability cannot economically be cut for forty or fifty years to come. Many speculators sold out while stumpage prices were high, leaving an over-capitalized fixed investment for later owners to struggle with.

The tradition of the industry has been that "stumpage prices double every ten years." A smaller return is not considered satisfactory. But stumpage prices have not risen materially in the last ten years, and for a time they have declined. Such a situation has played havoc with the expectations of many timber owners. The profitableness of investments in standing timber capitalized at billions of dollars is at stake. Big holdings are being cut up into smaller units more suitable for operating. Small holdings are usually too small to support an operation, and, as has been seen, are therefore withheld from the saw, the holder having practically no alternative. This whole situation which promises to fasten itself upon the industry is the chief reason why "price" has failed recently, in large measure, to be the regulator of the holding, or withholding, policy of timber owners.

VII

Another important factor apparently not considered by Professor Stephens, which has largely determined the character and extent of withholding of timber irrespective of the centralization or decentralization of holding, is the relative "accessibility," in the economic sense, of different stands of timber. This factor includes (1) cheapness of access of transportation facilities, (2) nearness to market, (3) topography, (4) density of stand, (5) quality of timber, etc. In the nature of things most of the timber now standing must be withheld from the saw over a long period. The real question at this point is not whether there is or is not withholding of timber, but whether the timber is being reasonably cut in the order of relative accessibility. The number of

ownerships is so large and the differences in financial strength of owners so great that hard-pressed owners in large numbers are cutting timber that is much less "accessible" than hundreds of billions of feet in other ownerships less hard pressed financially. Nearly half of the capital invested in the operating timber holdings in the West has been borrowed. This is responsible for much of the pressure for early liquidation, since the legal interest must be paid. Payment cannot be postponed simply because prices are low. The lower the prices the more lumber must be cut and sold. Such is the start of the "vicious circle" of prices of which the lumber industry has been often a victim.

That there has been cutting of timber of very unequal "accessibility" is attested by the following comparison drawn from the actual record of 119 representative lumbering operations in 1914. The total cost of logging, it is obvious, covers practically all the differences in operating cost due to differences in "accessibility." In the case mentioned the modal group of logging costs fell between \$3.00 and \$4.50 per thousand feet. But the lowest cost was \$1.62 and the highest \$10.43 per thousand feet.

Much timber is being cut which should not now be cut at all, since it can be sold only at a loss. The prevalence of this situation during certain recent periods has resulted in widespread failures, and in the forced sale of entire holdings at relatively low prices. The resulting bankrupt competition has had its usual effect on conditions in the industry, tending to cause still further recapitalization of investments at lower figures. What is probably needed is a systematic national forest policy, one not respecting ownership lines, but securing the cutting of timber in the order of relative "accessibility." Whether this can be accomplished through private enterprise depends in part upon the education of the public and the further enlightenment of the lumbermen, but in addition it depends upon the fitness of the laws governing industry to promote the accomplishment of this purpose desirable both for the industry and for the public.

WILSON COMPTON.

Washington, D. C.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Community. A Sociological Study. Being an Attempt to Set Out the Nature and Fundamental Laws of Social Life. By R. M. MACIVER. (New York: The Macmillan Company. 1917. Pp. xv, 437. \$3.75.)

This is easily the most notable book of the year in sociology. It is the more notable because its author, now associate professor of political science in the University of Toronto, confesses in his preface (p. viii): "In an early essay I remarked that there was no definite science of society beyond that contained in such specific studies as economics and politics. That view I now believe to be wholly mistaken, and I hope that this present volume adds one to the many disproofs of it revealed by the recent progress of the subject."

The expectations of the author will not be disappointed by the judgment of his colleagues in the social sciences; for that judgment will undoubtedly be that the book is one of the most important in the field of sociology published during the present decade. It is of especial value to economists and political scientists, because it delimitates, perhaps more clearly than any other work, the field and problems of sociology from those of the special social sciences, while at the same time exhibiting their vital connections.

The book opens with a discussion of the meaning of social fact and social law, of the relations of community and association, and of the place of sociology among the sciences. The author decides that the term "community" expresses best the object which sociology endeavors to study, rather than "society" or "association." He then proceeds to an analysis of "community," showing that it is to be thought of, not as an "organism" or "mind" but as "any area of common life" (pp. 21, 151) shared in some degree by distinct individuals. All social relations are, however, psychical relations, relations of minds. While "community is no greater mind," yet "it is created by that activity of men's minds in which they relate themselves incessantly to one another" (p. 95). What relates them is *interest*. Hence "the interests of men are the source of all social activity, and the changes in their interests are the source of all social evolution" (p. 99). To specific interests there correspond special associations which arise within the community to further those interests. These special associations are the

source of institutions, which are customs that have been sanctioned by the common will. The association is the living thing; the institution is but a form *instituted*, established, by the will of the community to serve some particular interest. Together they make up the structure of community.

The laws of the development of community are taken up and discussed in the final section (book III) of the work. This is the most important and constructive part of the work. After showing that the popular idea that communities pass through a regular cycle of growth, maturity, decay, and death is without scientific foundation, the author proceeds to discuss what he considers the three primary laws of communal development. The first is that "socialization and individualization are the two sides of a single process" (p. 214); or in other words, "the differentiation of community is relative to the growth of personality in social individuals" (p. 226). From this law many important generalizations flow regarding both community and personality. For example, real opposition between the interests of the individual and of the community, it becomes evident, is pathological, not normal. The second law is that "the development of community involves the gradual transformation of conflicting and parallel like interests into concordant like interests through the establishment of secondary common interests" (p. 327). In other words, the development of social life means a passage from methods of direct antagonism and of competition to methods of coöperation, hence a correlation between socialization and the principle of communal economy. Under this law the economic aspects of the social life receive extended consideration. The third law is the law of the correlation of socialization and the control of environment, in accordance with the general law that the higher the life "the less is it directly modified by the changes within its physical environment and the more does it modify that environment and its changes into conformity to its own purposes" (p. 383). From this standpoint the relations of community and environment are carefully considered.

It is impossible to outline in a satisfactory manner the argument of a book so fertile in ideas. The only fair thing that the reviewer can do is to urge all interested in social science to read the book. It is far easier, however, to criticise the work, and in certain respects it deserves criticism. It is doubtful, for example, if the author has rendered sociology a service by adding another

terminology to the many already in existence. It is not clear that the term "community" expresses better the subject-matter of sociology than such terms as "society" or "social life," as equal ambiguity attaches to its use. The use of "association" in the narrow sense of specialized, *purposive* association is arbitrary, and out of harmony with the general usage among sociologists, among whom it is regularly employed to include all forms of social life, and so as nearly synonymous with "social process." Again, it is unfortunate that Professor MacIver uses so exclusively in his sociological analysis subjective terms, such as "interests," "values," "purposes." While this is also the practice of many sociological and economic writers, unquestionably the trend of modern science is to substitute for such subjective terms objective terms wherever it is possible to do so. Finally, Professor MacIver's attempt to make psychology purely a subjective science, the science of "the knower" (p. 60), and thereby divorce the social sciences quite entirely from it, will scarcely meet with approval on the part either of psychologists or of a large number of sociologists. These are, however, on the whole, minor defects in a work whose substantial value nearly all students of the social sciences will heartily recognize.

CHARLES A. ELLWOOD.

University of Missouri.

The Physical Basis of Society. By CARL KELSEY. (New York: D. Appleton and Company. 1916. Pp. xviii, 406. \$2.00.)

Outline of Applied Sociology. By HENRY PRATT FAIRCHILD. (New York: The Macmillan Company. 1916. Pp. x, 353. \$1.75.)

Not so much a work on sociology as a collection of the data of sociology is the volume by Professor Kelsey. The author has not so much attempted to put out an original piece of investigation or a piece of close abstract reasoning within the traditional field of sociology as to assemble in the eleven chapters of his book a mass of illustrative and convincing data preliminary to the broader field of sociology. Everywhere he is primarily concerned in his viewpoint with the conditions of social existence and social development. He begins with the most objective and most indirect influences which operate upon man and his institutions—the physical conditions of the earth—and proceeds through a consideration of the struggle for existence and mutual aid, man's control over

nature, human evolution and heredity, race and sex differences, and population, over finally to a consideration of the role of institutions and the conditions affecting progress.

Two things especially are worth noting about this book. One is the great mass of data which has been assembled, especially under the earlier chapter headings. The last chapters seem to show some traces of having been hurriedly written and are not so rich in source materials, though they are more productive of sociological generalizations. In fact, the volume must be employed largely as a source book if used as a text, for the wealth of data which it contains would embarrass both teacher and student who attempted to use it in any very formal way. The data here assembled give evidence of the most extensive reading through sociological and often non-sociological literature for the sake of securing concrete bases for the inductions in the fields indicated. One might wish, however, that the author had added to his wealth of source materials a larger fund of interpretative generalizations, thus synthesizing them constructively into sociological theory.

The second important feature of the book is that it symbolizes very markedly some of the newer tendencies in the development of sociology. Recently we have heard a good deal of the fact that sociology must be based on biology and psychology; and some writers, doubtless including Professor Kelsey, would say geography. In a measure we have gotten away from the purely philosophical and subjective approach to sociology on the one hand and from the more or less pseudo-scientific approach from the standpoint of anthropology on the other. But most sociologists have found it rather difficult to go directly to the substitute basis of presenting the essential facts of geography, biology, and psychology as they affect human life. This is what needs to be done in constructing the new sociology and this Professor Kelsey has apparently sought to do. In this attempt lies his merit largely. Doubtless others will improve on his method, for they will seek to interpret where he is largely content with collecting and arranging data. But the work of collecting is preliminary and is therefore, at this stage of sociological development, of high value.

Professor Fairchild's "Outline" is essentially a guide to the study of society in its concrete adjustment aspects. It follows the lead most cultivated by the sociologists, especially in class instruction in the elementary courses, within the last ten or fifteen years. That

is, it is primarily "practical" or "applied" in the general sense of being concrete rather than abstract, though it is in no sense a study in the concrete methods of social adjustment technology. This movement away from the older abstract sociology, so manifest in this textbook, is perhaps not so much a protest against abstraction in itself as it is a more or less conscious search for adequate data upon which to build new abstractions in the place of the old ones which were too often made without sufficient facts.

Very recent tendencies in sociology are also manifest in this volume through the emphasis given to the economic aspects of social adjustment and to the closely related problems of population. These two subjects, in their various aspects and applications, occupy more than 250 of the 332 pages of reading matter in the book. The largest contribution of Professor Fairchild's book to the textbook literature of sociology is in its clear presentation of the relationships between wages, working conditions, efficiency, housing, and the more specific aspects of the problem of living standards and social welfare. No other general textbook goes so fully into these matters, and yet they are not here discussed from a merely descriptive or analytical standpoint. Conclusions and implications are most carefully drawn from the data presented. In his discussion of population the author follows in the main the conclusions of Malthus, though he works out in more detail some of the correlations of the factors determining increase and decrease of population. Towards socialism and feminism, the two radical movements to which he gives most space, he maintains an appreciative attitude, though he is more favorably disposed towards the latter than he is towards the former. The discussion of the aesthetic, intellectual, and religious phases of life is least complete and satisfying. To these aspects, which loom large in the actual living processes, is given less than forty pages.

On the whole there is a marked absence of the conventional and static classifications of subject-matter, such as is found in some of the textbooks on "social problems." There is no chapter entitled crime, or poverty, or the city, or the rural problem, though these subjects are discussed in some connection or other. They are not isolated and therefore largely sterilized but are considered as phases of a larger whole. The book is not particularly original. Perhaps no textbook in the general field of applied sociology would impress one as strikingly so. Furthermore, it may be said to be

rather elementary on the whole, but it has the merit of being clear and usually convincing.

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NEW BOOKS

ARIAS, I. G. *Principii di economia commerciale.* (Milan: Società Editrice Libraria. 1917. Pp. 948.)

CROBBI, U. *Trattato di economia.* (Milan: Società Editrice Libraria. 1917.)

ELLWOOD, C. A. *An introduction to social psychology.* (New York: Appleton. 1917. Pp. xii, 343. \$2.75.)
To be reviewed.

ELLWOOD, C. A. *Principes de psycho-sociologie.* Translated from the English by P. COMBERT. (Paris: Giard & Brière. 1917.)

ELY, R. T. *Exercises in Ely's "Property and contract in their relations to the distribution of wealth."* (New York: Macmillan. 1917. Pp. 34.)

FISHER, I. *Recherches mathématiques sur la théorie de la valeur et des prix.* Translated from the English by JACQUES MORET. (Paris: Giard & Brière. 1917. 6.50 fr.)

GRAZIANI, A. *Istituzioni di economia politica.* (Torino: Bocca. 1917. 25 l.)

LEAVITT, F. M. and BROWN, E. *Elementary social science.* (New York: Macmillan. 1917. Pp. 142. 80c.)

MCVEY, F. L. *Economics of business.* Modern business, vol. 2. (New York: Alexander Hamilton Inst. 1917. Pp. 346.)

This book is an introductory treatise on economics. It follows traditional lines in arrangement; lacks freshness in treatment and illustration; and is often infelicitous and open to misapprehension in wording. One has a suspicion that it was written or dictated hurriedly. What would the uninformed person learn from the following statement (p. 93) about consumers' coöperation? "The Roekdale (*sic*) Pioneers are the forerunners of this movement, and so successful has it been that the Scottish Wholesale Society has acquired an enormous business amounting to millions of pounds annually." The English Wholesale is several times as large as the Scottish. Robert Owen's work at New Lanark is ascribed (p. 93) to "the latter part of the eighteenth century" although he did not go to that place until 1800 and his achievements there were in the first part of the nineteenth century. It is stated (p. 115) that the act of 1791 provided for a dollar consisting of 23.22 grains of pure gold and on page 131 that under the Sherman act the government bought 4,000,000 ounces of silver monthly. The figures should, of course,

have been 24.75 and 4,500,000. On page 269 there is an arithmetical error in capitalizing an income which is not merely typographical since another numerical statement dependent upon it is consistent with the mistake. On page 308, in the second column of the table, the \$ sign would mystify the uninitiated. On page 324, speaking of Karl Marx, the author says: "Having studied Darwin and having made careful original investigation, he emphasized the inevitableness of the class conflict." Unfortunately for this contention the *Communist Manifesto*, in which the doctrine of the class struggle is so vigorously proclaimed, was published in 1848 and the *Origin of Species* in 1859. On page 333 it is said that "already legislation exists in forty-eight states providing for workmen's compensation for industrial accidents," the book being dated October, 1916. According to Bulletin 203 of the United States Bureau of Labor issued in January, 1917, thirty-two states, three dependencies, and the federal government have enacted compensation acts. The purpose and usefulness of trade unionism might have been set forth much more forcibly in the space used. Four propositions selected by the author as the basis of socialism are given as disconnected principles while they are causally interdependent, and the one which socialists emphasize as the source and origin of the others is given last. There is not space to call attention to what seem to the reviewer truistic, inconclusive, and *ex cathedra* treatments of many doctrinal and practical questions although the space used would ordinarily have allowed a reasonably good statement.

HERBERT E. MILLS.

PARETO, V. *Traité de sociologie générale*. (Paris: Payot. 1917. Pp. 800. 15 fr.)

PEDDIE, J. T. *A national system of economics. With a consideration of the Paris economic resolutions and of their influence on nationality*. (London: Univ. of London Press. 1917. Pp. 299. 5s.)

SCHELLE, G. *L'économie politique et les économistes*. (Paris: Doin. 1917.)

SELIGMAN, E. R. A. *Principles of economics*. (New York: Longmans. 1916. Pp. liv, 711. \$2.50.)

This popular work which was rewritten in the sixth edition only two years ago is again revised. Figures and authorities have been brought up to date and the text is changed in a few places because of events since 1914. There is not uniformity, however, in this revision. For example, a chart giving the index number curve of commodities (p. 464) is brought down to 1916; but under wages an excellent chart (p. 424) is brought down only to 1907, and figures upon the movement of nominal and real wages only to 1903. Upon these as a basis Professor Seligman leaves unchanged his generalization "wages have increased so that the laborers enjoy a continually greater command over the conveniences of life." In view of the facts and statistical literature of the last ten years, this statement should be

modified at least to the extent of dropping the word "continually." The reviewer has used this textbook since its first appearance as one of the required texts in large introductory classes and he has reviewed in recent years for this journal a number of books (in the main dreary reading) described as prepared "for the general reader." From the standpoint either of the college class-room or the non-academic reader, there are, in his opinion, not more than one or two works comparable with Professor Seligman's *Principles* and its continuous popularity is well deserved.

H. E. M.

Economic History and Geography

The Chartist Movement in its Social and Economic Aspects. Part

I. By FRANK F. ROSENBLATT. Columbia University Studies in History, Economics and Public Law, Vol. LXXIII, No. 1. (New York: Longmans, Green and Company. 1916. Pp. 248. \$2.00.)

The Decline of the Chartist Movement. By PRESTON WILLIAM SLOSSON. *Ibid.*, Vol. LXXIII, No. 2. (New York: Longmans, Green and Company. 1916. Pp. 216. \$2.00.)

Chartism and the Churches: a Study in Democracy. By HAROLD UNDERWOOD FAULKNER. *Ibid.*, Vol. LXXIII, No. 3. (New York: Longmans, Green and Company. 1916. Pp. 152. \$1.25.)

So stupendous were the influences of the Industrial Revolution that even now the perspective is scarcely sufficient to allow us to appreciate its results upon life in all its aspects, upon political, religious, and educational thought, and upon social movement. It is gratifying to know that careful study is being made of one of the most important and most neglected episodes in the first half of the nineteenth century and that Professor Seligman's library makes this possible for American students. It is to be hoped that these three monographs under review will be followed by others upon this period. Dr. Rosenblatt's *The Chartist Movement in its Social and Economic Aspects* is but the first part of a larger projected work made impossible by the war. It brings the history of Chartism down through its first stage only, culminating with the Newport Riot of 1839. There seems no particular reason for the qualifying phrase in its title since the political side of the movement is as much to the front as the social and economic. After chapters on Prototypes and The Whig Rule come three treating of the economic basis and underlying causes of Chartism; and

the remainder of the volume is given to a narrative of the movement and accounts of its leaders. The preliminary chapters are inadequate and disappointing. In the opinion of the reviewer they should either have been made much more exhaustive or cut down to a few introductory paragraphs. The narrative chapters bring out clearly the conflicting attitudes of the *moral force* and the *physical force* factions. There were interesting anticipations of modern syndicalist attitudes in the proposal of a *sacred month*, in reliance upon the lowest unorganized proletariat, and in the advocacy of spontaneous reckless outbreaks. The work is thoroughly and impartially done; but one has a feeling that the material had not been well enough digested and assimilated to enable the author to write with breadth of view and sense of proportion.

Dr. Slosson in his *The Decline of the Chartist Movement* brings out clearly the essential character of Chartism and its relationships. The passage of the Reform Bill of 1832 revealed the divergent aims of those who had achieved it. The middle class political radicals were laissez-faire and conservative so far as social and economic reforms were concerned. The working class aiming at economic improvement found that the Reform Bill had made its political participation less probable than ever, since its former allies were now on the other side. Chartism, a product of economic distress, of Owenism, of the ten-hour movement, of antagonism to the new poor law, of cheap money agitation, of trade-union weakness, of distrust on the part of working class radicals of the Free Trade element, was considered by both followers and opponents to be a class-conscious proletarian agitation aiming at a rectification of economic inequality. To that end it advocated the use of taxation, coöperative industry, state credit for working-class industry, abolition of land monopoly—all of which were conditioned upon realization of the People's Charter. But its unity was on negative policies and in its positive program three divergent tendencies were apparent, namely, collectivism, individualism, and a foreshadowing of single-taxism. Herein was the real cause of decline. United as to method but not as to aim, there came disintegration as a result of attainment of free trade in food, better factory laws, amelioration of the poor law, and other causes of increasing working class well-being. With the decline of the organized revolutionary movement upper class apprehension diminished so that gradually most of the economic and political ends of the movement have been secured. Further, as the Chartist

movement had temporarily absorbed the working-class energy that had earlier found outlet in coöperation and trades-unionism, after 1850 these two democratic working class undertakings reclaimed their own and the working class political agitation temporarily subsided. But Chartism had taught the workingmen that strength might come from party organization, had educated them through the party periodicals, had given them an international point of view, and had sown the seeds of anti-militarism, woman suffrage, and socialism. Dr. Slosson writes with a breadth of view and grasp not always found in doctoral theses.

The third of these monographs, Dr. Faulkner's *Chartism and the Churches* is a valuable contribution to a work which it is to be hoped may be written by some one in the not remote future upon the relation in the nineteenth century of social reform movements, ecclesiasticism and religion. Its chapter headings indicate its content: The Attitude of Chartism towards the Church; Chartist Substitutions for the Prevailing Christianity; Attitude of the Church towards Chartism; The Positive Contributions of the Church to the Chartist Movement. The work reveals most extensive use of the voluminous literature of the subject, is interesting and free from bias. The indexing of this volume and Dr. Slosson's is inadequate. The chief defect of this study is in its failure to make connection with anti-ecclesiastic and anti-clerical influences which in the period preceding Chartism had come to be widespread through Owenism. It was not only Owen's personal radical religious views but his fundamental social philosophy which aroused bitter religious controversy with widespread and continuing influence upon the British workingman. In asserting that "man's character was made *for* him, not *by* him" Owen attacked the almost unanimous prevailing religious opinion as to man's individual moral responsibility and drew fierce attack from Churchman and Dissenter alike. The Owenite movement developed a religious organization with all its paraphernalia of creed, dogma, meetings, Sunday Schools, ritual, and hymn-book. While this was not a part of the field chosen by Dr. Faulkner, it certainly deserved, as an immediate forerunner of the movement described by him, more attention than one passing allusion.

The second quarter of the nineteenth century was one of the amazing periods of revolutionary thought and movement. On the continent of Europe two political revolutionary periods,

the movements inspired by Cabet, Fourier, St.-Simon, and other Utopians, the beginnings of Marxian socialism, of anarchism, of state socialism, are some evidences of ferment. In England the later phases of Owenism, the Reform Bill, Chartism, visionary schemes of the union of all workers in single vast organizations, various coöperative undertakings, the Corn Law agitation, all revealed the restless spirit of the age. In the United States it was a quarter century not only of very remarkable industrial invention and development but also of independent thought and new movement. Jacksonian democracy, anti-monopoly agitation, visionary grandiloquent trades-unionism, Owenism, Fourierism, the establishment of many communities like Brook Farm and Oneida, the temperance movement, abolition, woman's rights, Frances Wright's "Free Enquirers," the anti-masonic furor, Mormonism, Millerism, spiritualism, kept life from growing dull. While not a great period in the world's history, it was bizarre and fascinating. Unrest affected every phase of life and thought. Monographs like those under review prepare the ground for a history of the period which shall bring these diverse religious, political, economic, and social movements into relation; and, if a guess may be made, find their explanation and cause in the general disturbance of life which grew out of what we call the Industrial Revolution.

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Vassar College.

Economic Development of Modern Europe. By FREDERIC AUSTIN OSG. (New York: The Macmillan Company. 1917. Pp. xvi, 657. \$2.50.)

Like the author's earlier volume on *Social Progress in Contemporary Europe*, this book aims not to explore new fields but to describe the results reached by the investigations of others, and to illuminate only the most significant features of recent and contemporary history. For his task the author shows marked qualifications. He has read widely, uses his authorities with discrimination, selects and arranges his materials skilfully, and sets forth his product in good English. He is accurate; slips in matters of fact are infrequent and unimportant. He provides for further study lavish lists of references, on which the only criticism to be passed is that they lack such notes of appreciation as will guide the untrained reader. Altogether, his book offers the best survey known to the reviewer of the recent economic history of Europe.

The most difficult problem before the author of a book of this kind is that of proportion—what topics to include, and what space to allow to each. Professor Ogg followed these principles: to devote most of his attention to the nineteenth century, contenting himself with a summary sketch of preceding conditions; to omit from consideration the more technical aspects of economic history, such as public finance; and to confine himself in general to the history of three leading countries, the United Kingdom, France, and Germany. A substantial volume is none too big to cover the topics that are left by these restrictions, and the author has in the main justified his principles by the results. He would have done well, in the reviewer's opinion, to have applied his first principle more strictly. Part I, "Antecedents of nineteenth century growth," occupying 114 pages, is the least effective portion of the book; it leads the author into parts of the field where it is extraordinarily difficult to be brief and yet exact, and tempts him either to simplify artificially, or to describe conditions as confused when in fact they were complex. Part II, "Agriculture, industry and trade since 1815," pages 117-340, covers the development of production in the leading countries, with an added chapter on Russia; part III, "Population and labor," pages 343-474, is devoted mainly to the organization and regulation of labor; and part IV, pages 477-641, treats of "Socialism and social insurance."

This sketch of the contents of the book will suggest that feature of its plan which is most open to criticism, the emphasis on social history at the expense of economic. The development of the speculative-capitalistic system is touched upon in various places, and is treated thoroughly from the standpoint of the laborers; but description and appreciation of the part played by the leaders of industrial development are inadequate. The topic is not an easy one to handle, for it is bound up with the development of business methods, and involves institutions of private credit which are elusive when attempt is made to sketch them in their general aspect. Yet it can scarcely be denied that modern capitalism is an aristocratic rather than a democratic product; and that the way of its explanation must proceed from the center of industry, where are the leaders and innovators, rather than from the mass of the laborers. It is ungracious, however, to criticise a book for what it does not seek to do, when so much in it is good and is well done.

Both teachers and students will be grateful to Professor Ogg for what he has provided them.

Yale University.

CLIVE DAY.

Standards of American Legislation. An Estimate of Restrictive and Constructive Factors. By ERNST FREUND. (Chicago: The University of Chicago Press. 1917. Pp. xx, 327. \$1.50.)

This book is the outgrowth of a series of lectures delivered at Johns Hopkins University in 1915. Its purpose is to suggest a system of positive principles to guide and control the making of statutes. The work is rather technical, presupposing a considerable knowledge of law and legal phraseology, yet it can be read with considerable profit by economists.

Chapter I, Historic Changes of Policy and the Modern Concept of Social Legislation, will perhaps prove the most interesting to economists. In this chapter the author analyzes the drift of modern legislative thought and its significance. He first shows the process whereby free and equal personal status has gradually been established. Through the abolition of slavery and serfdom, the removal of legal class distinctions, the recognition of the legal rights of aliens, and the emancipation of wives from domestic subjection, liberty and equality have received practically universal recognition. The main exceptions are the treatment of the colored race and children. The disability of the child is of course inevitable, but the rights of parents are more and more assuming the character of a trust. Legislation to punish cruelty to children and to establish a system of public care of juvenile dependents is liberating children from the abuse of domestic power, and thus represents a distinct triumph for the doctrine of human personality. The author next traces the development of the doctrine of freedom of thought. Until far into the seventeenth century it had been a commonplace of public policy that opinion must be controlled in order to insure the safety of the state. But gradually religious liberty has been established throughout the civilized world, and the free expression of opinion on all matters, but especially on political topics, safeguarded. The present war is, of course, leading to the reestablishment of the control of public opinion by the state, but submission thereto is regarded as "one of the most remarkable achievements of democracy and of education in public affairs."

The establishment of the foregoing rights of personality and of freedom of thought have been effected in the main by the mere removal of legal and other restraints; the movements toward the repression of unthrift and dissipation, the protection of public health and safety, and social legislation have, on the other hand,

involved an extension of the field of legislative activity and control.

It is interesting to observe that the activity of the state against the three leading forms of unthrif—drink, gambling, and vice—has reached its highest development in American democracy. Absolute prohibition, a radical interference with personal liberty, is being widely adopted; gambling, particularly where it takes the form of lotteries, is generally prohibited; and by means of “white slave” legislation a determined attempt is being made to suppress prostitution. The standards of this “moral” legislation are higher, it is true, than the standards of enforcement; yet the insistence upon high abstract moral ideals has a valuable educative influence.

Legislation to protect health and safety is being enacted in increasing quantity. This legislation has been necessitated by the utilization of the newly invented mechanical devices in the service of industry and by the marked progress of science in discovering the causes of diseases and their remedies. Though we live under free institutions, we submit to public regulation and control in ways that, according to the author, would appear inconceivable to the spirit of oriental despotism.

The legislative policies already described show two main tendencies: an increased appreciation of the value of individual human personality; and the adoption of the welfare of the mass of the people as the controlling consideration, rather than the security of the state and the established order. Both these tendencies are combined in the modern movement toward social legislation, a term referring to “those measures which are intended for the relief and elevation of the less favored classes of the community.” Though systematic relief has been given in England since 1601, yet the term “social legislation” was hardly used in connection with reform movements until recent years. This is because social legislation represents a new departure in legislative policy. Whereas the old relief was not connected with industry, and stigmatized the recipient, the new compensation systems (a phase of social legislation) carry no stigma or disability, but seem rather to be a partial compensation for injustice suffered. In enacting this social legislation the state so far has not departed markedly from its attitude of neutrality in the struggle between capital and labor, but the development of a new social conscience and of the

demand for increased state control points to the adoption of a new policy in this respect.

In the remaining chapters of the book—their importance is much greater than the proportion of space devoted to them in this review—the author shows why the common law has not met the modern social needs (ch. 2); how modern welfare legislation has endeavored to give effect to the altered concepts of right and wrong and of the public good, and what the nature of its task is (ch. 3); how the advance of legislation to new fields of control has been checked by constitutional provisions (ch. 4); how the existence and extension of the right of the courts to declare laws unconstitutional has retarded legislative progress (ch. 5); what are some of the fundamental principles to be observed in the enactment of legislation (ch. 6); and the extent to which courts, legislative practice, and jurisprudence are constructive factors (ch. 7).

The book is of a high order. The treatment is scientific, the mode of presentation illuminating, and the style excellent. It more than fulfils the author's modest wish to make some "slight contribution to the rapidly growing movement for the improvement of our statute law." This is particularly true since the author is imbued with the social point of view, a point of view which bids fair to exert an increasing influence on legislation.

ELIOT JONES.

Leland Stanford Junior University.

NEW BOOKS

AMBRAVANESWAR, S. A. *Progress and problems of industrial India.* (Trichinopoly: Published by the author. 1917. Pp. 30.)

BIZZELL, W. B. *The social teachings of the Jewish prophets; a study in biblical sociology.* (Boston: Sherman, French. 1916. Pp. 237. \$1.25.)

BORTHWICK, J. D. *The gold hunters; a firsthand picture of life in California mining camps in the early fifties.* Edited by H. KEFHART. (New York: Outing Pub. 1917. Pp. 361. \$1.)

BROOKS, E. C. *The story of corn and the westward migration.* (Chicago: Rand, McNally. 1916. Pp. 308. \$1.)

CAMBRE, E. V. *The economic future of Mexico.* (New York: Latin-American News Assoc. 1917. Pp. 19. 5c.)

CARTER, H., editor. *Industrial reconstruction. A symposium on the situation after the war.* (London: Unwin. 1917.)

CROCKETT, W. H. *Vermont. Its resources and opportunities.* (Montpelier: Secretary of State. 1917. Pp. 122.)

DAVIS, J. S. *Essays in the earlier history of American corporations.* Nos. I-IV. Harvard economic studies, vol. XVI. (Cambridge: Harvard Univ. Press. 1917. Pp. xiii, 547; x, 419. \$2.50 each.)

To be reviewed.

DOMINIAN, L. *The frontiers of language and nationality in Europe.* Published for the American Geographical Society of New York. (New York: Holt. 1917. Pp. xviii, 375.)

DU BOIS, J. T. and MATHEWS, G. S. *Galusha A. Grow, father of the homestead law.* (Boston: Houghton Mifflin. 1917. Pp. xi, 305. \$1.75.)

FOAKES-JACKSON, F. J. *Social life in England, 1750-1850.* (New York: Macmillan. 1916. Pp. ix, 338.)

FUCHS, C. J. *Die deutsche Volkswirtschaft im Kriege.* (Tübingen: Mohr. 1915. Pp. 75.)

GELBERT, L. N., compiler. *Facts about Georgia; a state rich in resources and opulent in opportunities.* (Atlanta: Chamber of Commerce. 1916. Pp. 277. \$1.)

Material about the economic and agricultural conditions of Georgia.

HAYEM, J. *Mémoires et documents pour servir à l'histoire du commerce et de l'industrie en France.* Quatrième série. (Paris: Hachette. 1916. Pp. 319. 7.50 fr.)

The fourth series of M. Hayem's collection comprises ten items on the history of industry and commerce in France from the seventeenth to the early nineteenth centuries. Based largely on materials from the provincial archives, this series, like those preceding, makes a substantial contribution to French economic history.

C. D.

HODGES, LER. *Petersburg, Virginia, economic and municipal.* (Petersburg, Va.: Chamber of Commerce. 1917. Pp. 166.)

KENT, C. F. *The social teachings of the prophets and Jesus.* (New York: Scribner. 1917. Pp. 13, 364. \$1.50.)

LEVETT, A. E. *The black death.* (Oxford: Clarendon Press. 1916. Pp. vi, 220.)

MUKERJEE, R. *The foundations of Indian economics.* (New York: Longmans, Green. 1916. Pp. xxvi, 515. \$3.)

The author, who has been a research student of Calcutta University, and who has for some time been investigating the economic organization of modern India, collects in this volume his scattered studies, and provides a comprehensive and useful survey of the conditions of production in that part of the British Empire. The book sketches the economic influences of the Indian system of family, caste and religion, presents detailed studies of the principal cottage and village industries, describes the rural system of trade and credit, and discusses the future of the organization.

The book will appeal to the interests of students of economic his-

tory as well as to those particularly concerned with the problems of modern India. Rural India is just emerging from the stage of village economy, with barter more important than cash transactions and with occupations largely determined by status, and with custom stronger than contract and competition. The caste system, with its curious economic restrictions and inconsistencies, offers many contrasts as well as some similarities to the medieval guilds, but the dominance of the merchant over the artificer, and the power of the petty capitalist in the developing organization, are features familiar to the student of European history.

The author believes in the vitality of many of the village industries, and suggests measures both technical and economic to strengthen them in the struggle with the "big business" which even in India now threatens to sweep the field.

CLIVE DAY.

PATTEN, S. N. *Culture and war*. (New York: Huebsch. 1916. Pp. 62. 60c.)

PORTER, E. C. and SLACK, A. J., editors. *Industrial America*. In Russian. (New York: American Russian Chamber of Commerce. Pp. 450. \$2.)

RODDY, H. J. *Physical and industrial geography of Lancaster county, Pennsylvania*. (Lancaster, Pa.: New Era Prtg. Co. 1916. Pp. vi, 113. 75c.)

TARIS, E. *La Russie et ses richesses*. (Paris: Roge. 1917. 4 fr.)

TRYON, R. M. *Household manufactures in the United States 1640-1860. A study in industrial history*. (Chicago: Univ. of Chicago Press. 1917. Pp. xii, 413. \$2.)

To be reviewed.

WHITMAN, P. P. *Seattle, an industrial city. Showing development of eastern manufacturing centers and needs of Seattle*. (Seattle: Seattle Chamber of Commerce. 1916. Pp. 32.)

The Virgin Islands. A description of the commercial value of the Danish West Indies. (New York: National Bank of Commerce. 1917. Pp. 34.)

La legislazione di guerra. Conferenze tenute nell'anno 1915-16 dai Soci Augusto Graziani, Domenico Schiappoli, Enrico Presutti, Roberto de Ruggiero, Angelo Mariotti, Federico Celentano. (Napoli: Circolo Giuridico di Napoli. 1916. Pp. 278.)

Agriculture, Mining, Forestry, and Fisheries

Land Tenure in the United States with Special Reference to Illinois. By CHARLES LESLIE STEWART. University of Illinois Studies in the Social Sciences, Vol. V, No. 3. (Urbana: University of Illinois. 1916. Pp. 135. 75 cents.)

Dr. Stewart tells us in the preface to his monograph that it is

based largely upon United States census statistics and explains the reasons why he has taken Illinois as a type study of land tenure. These reasons are the following:

(1) Its size and importance in the production of grain; (2) the variety of conditions in its agricultural economy; (3) its location in the great farming region of the Mississippi valley; (4) the ease of access its farmers have to large local markets as well as to other domestic and to foreign markets; and (5) the fact that, agriculturally, Illinois is neither an old nor a new state.

The scope of Dr. Stewart's work is indicated by the five chapters into which it is divided: A Sketch of Land Tenure in the United States; Tendencies in the Agricultural Economy of Illinois; Changes in Land Tenure in Illinois; A Description of Farm Operators in Illinois; The Relation of Tenure to Rural Economic and Social Conditions in Illinois. Special mention should be made of the many unusually clear maps illustrating statistical data. There are eighteen of these. The work is well planned and carefully executed, reflecting credit upon the author and upon Dr. Kinley, director of the economic seminar, under whose leadership the monograph was written. Special mention may be made of the caution in drawing conclusions from data and the absence of the catch-phrases made so familiar by agitators for land reform, who are not familiar with present facts of land tenure and have no knowledge of what is involved in their proposals.

This work ranks among the best of the monographic studies on the subject of land tenure in the United States. No startling results are reached, but no one should attempt to deal with the subject in a practical or scientific way without reading carefully this work.

It confirms the impression of the spread of tenancy and brings before us clearly some of the causes. One is high land values, making it possible for the land to support two classes of men—farmers and tenants. Probably it will generally be found that there is some connection in the United States between price of land and tenancy; but differences will be found traceable to the use made of the land. What is true of wheat and corn land will not hold to the same degree for dairy and fruit farms. Dr. Stewart also suggests that opportunities for hunting and fishing may exercise an influence in keeping the owners on the land. But we must always ask what tenancy means before we take any drastic position with respect to it. Sometimes it means a very good and desirable

thing and a certain amount of it will be included in any ideal system of land tenure. How often is tenancy merely a family affair, whereby the older generation affords opportunities to the younger generation! Dr. Stewart says, "When farmers retire, they usually rent their farms either to a relative by birth or marriage or to a trusted farmhand" (p. 21). This conclusion is borne out by investigations conducted by Professor K. L. Hatch, of the University of Wisconsin, who estimates that in Iowa county of Wisconsin over one half of the tenants belong to the families of the owners.

We are not warranted, however, by Dr. Stewart's monograph or by other facts known in thinking that tenancy as it exists in the United States gives no occasion for alarm. It is spreading and in many cases it produces serious evils, especially of a political and social kind. Schools and churches, for example, are not likely to be well supported by tenants who do not have a permanent stake in a community. Undoubtedly land is not likely to be so well cultivated by tenants, but Dr. Stewart is not able to give us many facts bearing on this subject. He points out the need of cost accounting studies to show the relative profitableness of various forms of tenure.

One question which deserves further attention is this: To what extent is the increase in tenancy due merely to increasing age of the country? As a new country grows older, those who have settled it likewise become older and must make way for the oncoming generation. It would be well to picture ideals showing to what extent tenancy ought to increase under wholesome and desirable conditions as the country grows older; and then to contrast the actual with the ideal.

There is little to criticise in Dr. Stewart's monograph. It is not a complete investigation and does not profess to be, and it is very cheap to criticise a writer for not doing what he did not undertake to do. The reviewer, however, thinks that the title is a misnomer and misleading. The author does not discuss land tenure in the United States with especial reference to Illinois, but he does discuss land tenure in Illinois and prefaces it with one chapter dealing with the United States as a whole. The author mentions also the fact that his plan is to carry on more field investigations than have as yet been conducted. These are desirable and urgently needed to bring out the significance of the statistical data revealed by the census.

In conclusion the reviewer expresses the hope that Dr. Stewart may continue the work which he has so well begun. The question of landed property is the great question of the twentieth century and an immense amount of work must be done by workers like Dr. Stewart before we shall be in a position to deal satisfactorily with the questions of land tenure as they become more and more pressing.

RICHARD T. ELY.

University of Wisconsin.

Meat Situation in the United States. Part V. Methods and Cost of Marketing Live Stock and Meats. Report No. 113, Contribution from the Office of Markets and Rural Organization, CHARLES J. BRAND, Chief. (Washington: United States Department of Agriculture, Office of the Secretary. 1916. Pp. 98.)

Early in 1914, a committee of seven investigators, headed by Dr. B. F. Galloway, then Assistant Secretary of Agriculture, was appointed by the Secretary of Agriculture to study the economics of the meat situation. The committee made some investigations but did not report formally. At their suggestion, however, the United States Department of Agriculture undertook the preparation of five independent reports on different phases of the meat problem. These reports have been issued under the general title of the *Meat Situation* in five separate bulletins or parts.

Part I deals with the *Statistics of Live Stock, Meat Production and Consumption, Prices, and International Trade . . .*; part II, with *Live Stock Production in the Eleven Far Western Range States*; part III, with *Methods and Cost of Growing Beef Cattle in the Corn Belt . . .*; part IV, with *Utilization and Efficiency of Available American Feed Stuffs*; part V, with *Methods and Cost of Marketing Live Stock and Meats*. Each of these parts was written by specialists of the United States Department of Agriculture and each report is complete in itself.

Part V purports to deal only with those phases of livestock and meat marketing "which bear most directly upon the economic aspects of the meat situation." It is in no wise a comprehensive or conclusive treatise although it does follow more or less closely for about ninety pages the devious trails of different kinds of livestock from grower to consumer. Most of the definite figures used were taken from various familiar sources.

The bulletin deals principally with three topics: (1) the relative extent and importance of different marketing methods, (2) factors in the cost of marketing and distribution, and (3) relative margins in marketing and distribution. The principal original contributions of the authors are two; first, an estimate by states of the percentage of livestock marketed by different methods. This report is based on estimates made by a variety of persons, many of them agents of the department. In general, they indicate that "one-half of the beef cattle, two-thirds of the hogs, and four-fifths of the sheep and lambs marketed pass through the large central markets; one-third of the beef cattle, one-twelfth of the hogs, and one-eighth of the sheep and lambs are sold for local slaughter." While the data by states have value they are not sufficiently accurate for the careful investigator and few conclusions can be drawn from them.

The other original contribution consists of detailed accounts of the cost of marketing, slaughtering, and retailing meat, and selling the by-products of 9 lots of cattle marketed through central markets, and 5 lots of cattle (5 animals) marketed locally. The cattle are followed from the ranch through the packing plant and at least one animal in each lot was traced through the retailer. In some instances the actual figures were obtained; in others it was necessary to take approximate figures from the retailers. These accounts are the most valuable part of the study.

The section on market prices and supply is the least satisfactory part of the report. The price charts are numerous but in some instances are not clear and are over-crowded with data. The lines are untraceable and the labels unintelligible. The description and interpretation of the data are unsatisfactory, both in content and construction, and the fifty-seven varieties of punctuation which one finds in the legends beneath the charts are irritating as well as confusing. A case in point is Plate XII, a chart of sheep and lamb prices which shows a "five-year average" price line far above the price of every individual year. No explanation of this remarkable phenomenon is made. The label attached is unintelligible.

The monograph has value as a preliminary statement. It suffers from too many authors, too few original data, and too hasty compilation.

ALEXANDER E. CANCE.

Massachusetts Agricultural College.

The Cost of Living on Minnesota Farms, 1905-1914. By F. W. PECK. (St. Paul, Minn.: University of Minnesota Agricultural Experiment Station. 1916. Pp. 31.)

Another work has been added to the small but growing number of studies which deal with actual living conditions among our people. Mr. Peck's inquiry into the cost of living on Minnesota farms supplements admirably the studies made by Chapin, More, Streightoff, and others into the living conditions among working people. The average annual expenditure of \$816.13 for food, housekeeping, furniture, fuel, and rent which is found by our investigator to be the cost of these things to the farmer's family dissipates entirely the current notion that the country is a peculiarly cheap place in which to live.

The cost of living upon Minnesota farms is ascertained by the cost accounting method of inquiry rather than by the method of a mere questionnaire, and the semblance to reality of the facts presented is much improved as a result. Field men are sent out from the University of Minnesota who record at the farm house the expenses which are incurred by the farmer's family as living expenses. The families under observation in this way are unfortunately few—only twenty-two in all; but the period during which the observations are carried on is a long one—some eight or nine years—extending from 1904 to 1913. The families are average-sized families of four or five, and every living expense of each family is tabulated, save only those for clothing and for amusements and culture.

The study, in addition to its main purpose, throws light upon at least two great problems concerning farm finance. First, it clears up the question of the farmer's income. Farm management surveys of which a great number have been made in recent years have sought invariably for two things: (1) to ascertain the style of farming carried on, and (2) whether it is profitable or not. The farm management analysis which may be said to be the standardized one in this country (*i.e.*, used universally by the United States Department of Agriculture and the various state experiment stations) seeks as its measure of the successfulness of the management of a farm, the so-called farmer's "labor income." No attempt is made in this analysis, however, to evaluate the farmer's cost of living; so that the rather shabby labor incomes which are represented by these surveys must always be understood to be an income which is in addition to the farmer's living. The present

study, by showing how much it costs the farmer to live, gives data which, when added to the farmer's labor income, show the entire earnings of the farm business.

Second, it clears up the myth which still prevails in the minds of vast numbers of people that the farm family subsists directly from the farm on which it lives. Both in respect to what was spent for food and also with regard to the total living costs, the farm is shown by this bulletin to have furnished directly a smaller amount than was purchased. Of the total cost of living of the farm family, the farm indeed furnishes only 22.1 per cent, while of the food alone which is used, the percentage is slightly more than twice as much. The investigator observes that to the extent only that farm products are cheaper to the farmer through not having had to undergo distribution through the middlemen system it may be said that living expenses are lower upon the farm than elsewhere.

The methodology of the investigations has great practical significance also because, as the author says, "the facts [farm living costs] have never been known . . . as the cost of farm items could not be estimated." The bulletin explains, however, that they can be estimated; and, while the plan followed of valuing the farm produce which had no local market—garden produce, fruit; etc., by its costs of production seems cumbersome, nevertheless, it is shown that it can be done. The price of purchased commodities and household labor presented no difficulties, but the appraisal of rent and furniture equipment was not so easy. Indeed, the rent expense was made an arbitrary charge, a flat interest rate being used upon the average value of the houses.

As is frequently the case in every field of affairs a new and genuine truth may prove to be the open sesame to a vast number of related problems. So it is claimed for this study that it will assist in determining "the annual expenditures on farms," "equitable wages for farm help," "the total cost of man labor," and "the gross income in farming as a business."

WILBUR O. HEDRICK.

Michigan Agricultural College.

Marketing and Farm Credits. A Collection of Papers and Documents Read at the Fourth Annual Sessions of the National Conference on Marketing and Farm Credits, Chicago, Dec. 4-9, 1916. (Madison, Wis.: Charles W. Holman, Secretary, 340 Washington Bldg. 1917. Pp. 546. \$2.00.)

This is the best of the three volumes in this up-to-the-minute

series on agricultural economics. All viewpoints are represented in this volume, both as to principles and as to programs. Main cleavages of opinion arise over two questions, (1) price fixing and (2) government help versus self help. The formal papers (and to a limited extent stenographic notes on the discussions) are grouped under four main heads: Credit, Land Settlement, Marketing, and Organization of Agriculture.

Credit is discussed by five speakers, the chief topic being the Federal Farm Loan act. A representative of the Farm Loan Board analyzes this act and considers it "coöperative credit," although it is strictly a first mortgage land credit law. The success of actual coöperative credit, as worked out in North Carolina, is set forth by William R. Camp. Alphonse Desjardins, father of coöperative credit in Canada, expresses the belief that the United States will discover and remedy the defects in the new Farm Loan act. "I do believe most strenuously," he says, "in the great principle of self-help, not having any faith in any state-aid system, believing as I do, that the latter is more demoralizing than educative for the masses."

The land settlement problem receives the ablest treatment of any subject in the volume. Professor Mead brings to the discussion of this topic his long years of experience in Australia, and his more recent experience as member of the California Commission on Land Colonization and Rural Credits. Land settlement, he says, is a public question, not a private question—a question of the "home-seeker" versus the "homesucker." Professor E. Dana Durand shows the importance of colony settlements in the peat lands and logged-off lands of the North. He favors state action to the extent of clearing or draining the land, of granting credit to the extent of cost of improvements, of selecting and developing first the best suited lands, and of sale of state lands only to bona fide settlers. Max Loeb, of Chicago, proposes a land certification scheme whereby the buyer would be truly informed as to his purchase, a sort of "pure-food law" applied to land purchase. Hector MacPherson, of Oregon, condemns the promoters and speculators who exploit and rob homeseekers. Frederic C. Howe proposes as the first solution of the land question the single tax. As an alternative he proposes government colonization. The speakers on this topic show that the situation as concerns land ownership and settlement is critical. And we have no land policy.

One hundred and fourteen pages are given to the discussion of

the live-stock marketing problem. And not one packer is heard from. The growers of Texas, Colorado, Wyoming have their day in court. All is not well with the live-stock industry, according to these speakers, and the blame is laid at the doors of the great packing houses. More information is demanded by the speakers before any program of action is chosen. An investigation of the live-stock industry by the Federal Trade Commission is urged. Coöperative packing houses are now on trial in the United States. F. A. Bingham, vice-president of the farmers coöperative packing plant at Rockford, Illinois, discusses that plant. "With regard to the marketing of the product," says he, "there is nothing to it." This house had just bought its first carload of stock. Charles W. Holman sets forth in great detail the history and failure of the farmers coöperative packing plant at LaCrosse, Wisconsin. Other phases of marketing treated are perishable farm products, cheese and whole milk. The by-laws of the National Milk Producers Federation are given in full.

Price fixing by law, causes of fluctuations of prices of grain, marketing of export wheat, factors that govern grain prices, are some of the topics very ably covered in the paper of Julius H. Barnes. Price fixing is further discussed by J. N. McBride, state market director for Michigan. He favors "transference of price making from the buyer to the producer," and contends that this "is the rule in other industries." The Michigan bean growers have for the past two years fixed a minimum price, but the market price has kept above this minimum.

Kenyon L. Butterfield outlines a basis for a national agricultural organization, springing from purely voluntary coöperative movements among farmers, with the local community as the unit of organization. The movement must be primarily in the hands of the farmers themselves. They can federate with county and state federations or with a national organization. This would furnish clearing houses to provide a program and a policy.

Assistant Secretary of Agriculture, Carl S. Vrooman, speaks eloquently of the farmers' fight "with the usurer, the fake middleman, the transportation shark, and the other business pests that feed off the profits of the farmers' business dealings."

The volume contains the provisional constitution and by-laws of the National Organization Society of America and also a full copy of all resolutions adopted by the conference. The meaning of the conference and the work of the N. A. O. S. are discussed by President Frank L. McVey.

The volume is well edited. Its mechanical make-up is excellent. All students in the field of agricultural economics will find this work one which they can ill afford to be without. Correct and sane agricultural policy is foreshadowed in this volume.

JAMES E. BOYLE.

North Dakota Experiment Station.

NEW BOOKS

- BILLINGS, G. A. *Seasonal distribution of farm labor in Chester county, Pennsylvania.* Contribution from the Office of Farm Management. United States Department of Agriculture, Bulletin 528. (Washington: Superintendent of Documents. 1917. Pp. 29. 10c.)
- ELTZBACHER, P., editor. *Germany's food, can it last?* (London: Univ. of London Press. 1917. Pp. 256. 2s.)
- HARRIS, F. S. and ELLISON, A. D. *Dry-farming in Utah.* (Logan: Experiment Station. 1916. Pp. 35.)
- HOPKINS, C. G. *Why Illinois produces only half a crop.* University of Illinois Agricultural Experiment Station. Circular no. 193. (Urbana: 1917. Pp. 16.)
- JOHNSTON, J. *Food production in France in time of war. Supplementary report to the trustees of the Albert Kahn travelling fellowship.* (Dublin: Maunsel & Co. 1916. Pp. 32. 6d.)
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Manufacturing Industries

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Transportation and Communication

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- BLAKE, H. W. and JACKSON, W. *Electric railway transportation.* (New York: McGraw-Hill. 1917. Pp. 487. \$5.)
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- A bibliography is given in the author's introduction.
- WARNE, F. K., compiler. *Before the Interstate Commerce Commission: I. & S. docket no. 774, Lake cargo coal rates, dockets no. 8725, 8598, bituminous coal to Central Freight Association territory and dockets no. 7662, 6951, 7089, 7371, 7667, 7668, 7669 and 7422; supplementary exhibits, revenues, expenses, income and surplus of sixteen bituminous coal roads, 1908-1916; exhibits by the Pittsburgh Coal Operators' Association*. (Washington: F. K. Warne, 421 Southern Bldg. 1917. \$10.)
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- Railway nationalization and the average citizen*. (Toronto: McClelland, Goodchild, & Stewart. 1917.)
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Trade, Commerce, and Commercial Crises

Marketing Methods and Salesmanship. By RALPH STARR BUTLER, HERBERT F. DEBOWER, JOHN G. JONES. Modern Business Series, Vol. III. (New York: Alexander Hamilton Institute. 1916. Pp. xxii, 555.)

Marketing Methods. By RALPH STARR BUTLER. Modern Business Series, Vol. V. (New York: Alexander Hamilton Institute. 1917. Pp. xxi, 346.)

Salesmanship and Sales Management. By JOHN C. JONES. Modern Business Series, Vol. VII. (New York: Alexander Hamilton Institute. 1917. Pp. xvii, 358.)

The reviewer has on his desk the 1911, 1914, 1916, and 1917 editions of this part of the Modern Business Series. There may have been other editions within these seven years. Comparing the editions at hand the evolution of the present volumes appears to be as follows: Volume IX of the 1911 edition consisted of "three separate treatises bound in one": (a) on advertising, (b) on selling and buying, and (c) on credits; (a) and (b) were written by Galloway and (b) by Butler; credits did not receive half as much space as either of the other two. The reviewer's copies of the 1914 edition are bound separately: "Advertising" was completely rewritten by Messrs. Tipper and Hotchkiss and made very much better; "Selling and Buying" was rechristened "Marketing Methods," a much better name and one that it has retained to date; and a new volume was created, "Salesmanship," which embraced the theory and practice of sales and the sales organization; this was written by DeBower and Jones; "Credits" was rewritten by Wahlstad. Volume III of the 1916 edition, "Marketing Methods and Salesmanship" is by the same authors (Butler, DeBower, Jones) and consists of the 1914 volumes bound together. In 1917 "Marketing Methods" by Butler was bound as volume V and "Salesmanship and Sales Management" by Jones was bound as volume VII.

The following differences between the 1916 and 1917 editions may be noted:

1. The editors and authors have sought to keep the texts abreast of the times where important changes of fact have occurred. For instance, the prominent role in public and trade discussions played recently by "price maintenance" would justify a more extensive treatment of that subject than was formerly given. Chapter XIII (volume III) of the 1916 edition on "Protecting

the Manufacturer's Goodwill" has been developed into two chapters in 1917, the second taking the heading "The Case for Price Maintenance." As far as the contents and manner of treatment are concerned it does not appear why the chapter was divided: there is quite as much argument for price maintenance in the first chapter as in the second. The sum total of additional information on this subject is a mere pittance. In the statement of the methods of price maintenance it adds a third method, by 'gentleman's agreement'; this is probably well taken, for the recent court decisions adverse to the other methods will likely bring this method more and more to the front. In this discussion the author refuses to state his position on the question of price maintenance, nor does he present the recent history of price maintenance legislation and court action; it is also regrettable that he does not give actual illustrations of the methods of price maintenance and how they work. The only other place where changes of fact have occasioned changes of treatment is with respect to chain and coöperative stores: the chain stores system and coöperative and jobbing enterprises are fast rising into prominence. Chapter IV (volume III, 1916) on the "Chain Store" contained somewhat extraneous sections (Nos. 60-66) on coöperative stores; in the 1917 edition these sections are carried forward and put into a new chapter, XIV (volume V), on "Substitutes for the Middleman." This chapter discusses (1) substitutes for the ordinary retail stores—(a) coöperative stores and buying clubs as organized by the consumers and (b) chain stores and direct consumer sales as used by manufacturers; and (2) substitutes for the ordinary jobber—(a) retail buying exchanges, (b) coöperative wholesale houses, and (c) coöperative retail chains. This arrangement is a great improvement over the 1916 plan and is a fairly good discussion of the subject.

2. Comparing the section heads one would get the impression that considerable data had been added; but upon examination it is seen that the apparently new sections are, for the most part, only divisions of former sections with titles prefixed (*e.g.*, *cf.* pp. 35-38, 1916 and pp. 63-68, 1917, volume V) and the apparently new chapters are divisions of former chapters (*e.g.*, *cf.* chapter VII, 1916 and chapters V and VI, 1917, and *cf.* chapter IX, 1916 and chapters VIII and IX, 1917). Here and there through the text a small paragraph is added but it adds little or nothing to the value of the chapter.

3. As to changes in the method of presentation, logic, or style,

the following may be noted: some sections are split up and the parts named, others are combined; many titles of sections are improved, and the sections are numbered by chapters whereas they were formerly numbered continuously through the book. There are many changes of phraseology but very few of them issue in greater clarity, precision, or better grammar. The editors have wisely dropped some irrelevant parts, as chapters IV and V (1916), on "The Training of Retail Salesmen," which were irrelevant and illogical interpolations in the exposition of the manufacturer's or jobber's sales organization. At the close of the volumes of the 1916 edition were found several pages of questions, arranged and numbered to correspond with chapters and sections, each question bringing out the chief point in its particular section; in the 1917 edition the questions are grouped at the close of each chapter in fine type, are unnumbered, are fewer in number, and are of a better character since they are thought-inducing rather than expository; in each of these respects the reviewer believes the questions are improved. On the whole, the number and extent of changes are much greater in volume V than in volume VII.

"Marketing Methods" (volume V, 1917) is devoted to "the technique of advertising and the technique of salesmanship—and to those considerations that must receive attention before either salesmanship or advertising is started on its mission of influencing the market"; it is written from the manufacturer's point of view. After stating the general "chain of distribution" it treats: (1) the retail outlets—general, specialty, chain, and mail-order stores; (2) the jobber's functions and problems such as private brands, exclusive agencies, price maintenance, substitutes for jobbers, etc.; and (3) the development of a selling campaign through jobbers and retailers, or through retailers, or direct to consumers.

Volume VII (1917), "Salesmanship and Sales Management," aims to present the "fundamental principles underlying the whole field of personal salesmanship, as revealed in the experience of a large number of successful salesmen" and "to formulate the principles underlying successful salesmanagement in all its phases." In the first part the selling process is carefully detailed through the preliminaries, the interview, and the agreement; there is a study of the "human appeals that sell," of the qualities and character of the salesman, of his duties, and of his relations to his house and customers. In the second part are considered the qualifications and duties of the salesmanager, the selection of salesmen, their

equipment and compensation; and it closes with chapters on the methods by which sales are reported and by which salesmen are stimulated to high efficiency.

Together these books make the best existing treatment of their field; in fact they are quite alone in their field, and the importance of this field is being recognized more and more; as "schools of commerce" are instituted in our universities the need of textbooks for courses in these lines is being acutely felt. The reviewer has used the 1914 and 1916 editions as texts and his conclusions, seconded by many of his pupils, are that the texts are sketchy and artificial for use by upper college classes; they are written for too popular an audience and not in the scientific strain and depth which fit college men; there is a crying need for genuine college texts in this field. The texts are also written from a purely business point of view; they are divorced from the economic principles developed by the earlier courses in the elements of economics (instance volume V, pp. 276-277 on prices); there is need of texts which correlate economic concepts and doctrines with practical business economics; texts so built will find a more warrantable berth in economics courses. Too many of the illustrations are by name only; to say, by way of illustration, that John Doe and Company practiced price maintenance by the "contracts" method is practically useless unless sufficient details are given to make the reader comprehend the John Doe practices with some definiteness; such illustration could be made to lend exceptional life and interest to the book by such fuller statement. Finally, the reviewer believes that, while the texts aim to be expository only, this exposition would be much improved if the historical side were given more attention; if the genesis of certain business practices, with their whys and hows, were delineated.

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NEW BOOKS

CAPORALI, D. *Istituzioni di diritto commerciale ad uso delle scuole di studi applicati al commercio.* (Torino: Bocca. 1917.)

HARTLEY, E. F. *Study of cartage costs in city of Washington.* (Washington: Superintendent of Documents. 1917. Pp. 14. 5c.)

KITSON, A. *Trade fallacies. A criticism of existing methods and suggestions for a reform towards national prosperity.* (London: King. 1917. 5s.)

Analysis of the present foreign trade of the United States. (Boston, Mass.: Directors of the Port of Boston. 1917. Pp. 19.)

List of references on embargoes. (Washington: Library of Congress. 1917. Pp. 44.)

Official proceedings of the fourth national foreign trade convention held at Pittsburgh, Jan. 25-27, 1917. (New York: National Foreign Trade Council. 1917. Pp. 600. \$2.)

Report to the American manufacturers export association by the American Industrial Commission to France, September-October, 1916. (New York: American Industrial Commission to France. 1917. Pp. 256. \$5.)

First annual report on markets and marketing for the year ending December 1, 1916. (San Francisco: State Market Director. 1916. Pp. 110.)

Frank Waterhouse and Company's Pacific ports, a commercial geography, commercial dictionary, transportation guide and marine manual of the Pacific Ocean, with full information for importers and exporters. Third edition. (Seattle: Terminal Pub. Co. 1917. Pp. 352. \$3.)

Accounting, Business Methods, Investments, and the Exchanges

The Administration of Industrial Enterprises with Special Reference to Factory Practice. By EDWARD D. JONES. (New York: Longmans, Green and Company. 1916. Pp. vi, 442. \$2.00.)

"The purpose of this work," as stated in the preface, "is to present what may be called first-class practice in the administration of industrial enterprises," or, in other words, "to trace the application of the scientific method in industry. . . ." The major topics dealt with are physical equipment, administrative organization and methods, the adjustment of the relations of employment, the buying and selling side of manufacturing. The proportions of the work are not perfect. Too much space is devoted to the highly technical subject of "layout of a manufacturing plant" and not enough to modern aids to an enlightened administration. The treatment of cost accounting is far too meager and there is nothing at all on managerial statistics and the graphical presentation of facts. Nevertheless, the ground in general is covered with judgment and as thoroughly as a work of moderate size addressed to the general reader would permit. At the end of each chapter is a well-selected bibliography of special works for the benefit of those who wish to delve more deeply into particular points of interest.

The strong feature of the book as a whole is that, though rich in information, it is no mere collection of information. With breadth of outlook and freshness of style the author illumines his statements of industrial procedure; there is interpretation, and a constructive setting forth of "the new method and the new spirit." Especially happy is the author's discussion of those aspects of the subject most nearly related to economics, as that of the general wage situation (pp. 226-227) and his answers (p. 239 and following) to the objections to scientific methods in industry. He goes straight to the point when he says, "The true ground of opposition of organized labor to scientific management is its aim of paying men according to individual performance." His treatment of purchasing, selling, credit, and related topics is excellent.

Where the author most falls into error is in handling some of the technical features of scientific management—a subject which is new, and upon which misinformation abounds. He is, for example, unfortunate in his handling of "time study." It is not correct that "the first step in time study consists in the accurate measurement . . . of the times required for the performance of the elementary human movements of which any job is composed. Time study does not concern itself with machine speeds; . . . " (p. 233). On the contrary, the first step before timing the movements of the operator is to thoroughly standardize the job, and a leading feature of that is the establishment of standard machine speeds. Again, the time study "observation sheet" reproduced on page 235 is misleading. In good time study practice it is customary to reject the lowest recorded time, if divergent, of a series of observations of a detail operation and not to treat it as a "minimum time." The footing of this "sheet" presents most unusual, hybrid practice. Where time studies are made at all and a proper "time allowed" established, it is not customary to have premiums begin when the work is done "in time and 2/3." Much of the discussion of The Newer Wage Systems in chapter 14 is uncritical.

To slip up in such matters is not, of course, a material shortcoming. In all essentials the book is unquestionably sound, and abounds in critical comments of value. One wishes there were more of that sort of interpretation in which the author is at his best. This book is to be highly recommended to those who do not know much about industrial practice and wish to know.

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CHARLES W. MIXTER.

Railroad Valuation. By HOMER BEWS VANDERBLUE. Hart, Schaffner & Marx Prize Essays, XXIII. (Boston: Houghton Mifflin Company. 1917. Pp. xiii, 222. \$1.50.)

There seems to be no end of valuation literature. Professor Vanderblue's book, however, is a worthy contribution. Its greatest usefulness lies in the collection and classification of the many confusing theories, decisions, and opinions that have accumulated in the comparatively short time since rate reasonableness and fair value were first linked together.

Professor Vanderblue treats the subject both as "a study in the economics of the distribution of income" and "in the economics of railroads." He does not, however, define either of these terms. Moreover, the frequent use of cant economic phrases, even with a view to stamping the work as scientific, limits the utility of the volume. A practical problem is not brought nearer to solution by frequent abbreviation of the argument through the use of the terminology peculiar to the field of the science.

It is not essential for the purpose of this review to consider in detail the author's discussion of all the topics of valuation. His historical summary of the development of the legal doctrines of "fair value" is very good, but nothing is offered which might clear up the muddle. Certainly it is difficult to harmonize economic theories and legal *dicta*. The suggestion to substitute "unimpaired investment" for "cost-of-reproduction" as a basis of fair value is like calling six of one, half a dozen of another. Moreover, the term "unimpaired investment" may be interpreted variously. It may refer to the upkeep and maintenance of the physical elements of the property. According to this view it does not differ essentially from the idea of reproduction cost, and the substitution of a pet economic phrase for a term that has already received judicial sanction merely intensifies the curse of Babel. The multiplication of definitions is the most obstructive feature in the solution of valuation problems.

A more common interpretation of unimpaired investment relates to earning power. Investment cannot be considered separately from earning power. It has no direct or necessary reference to physical property. To borrow an economic expression, investment represents the application of a fund to productive use. It is the force which (in the language of Professor Irving Fisher) determines the flow of the "capital stream." A railroad may maintain its physical corpus in a brand new condition, but if it ceases to

earn revenue, the investment is "impaired" and perhaps eliminated. Thus the "capital goods" may remain visible and intact, but the "capital stream" has evaporated.

Professor Vanderblue's discussion of the intangible elements of fair value is confined largely to a review and digest of judicial opinions and economic theories. Very little is added which might assist in the application of the dollar mark to intangibles, the author admitting that "no usable solution appears possible" and that "the conjectural nature of the valuation of tangible assets is multiplied many fold" in an appraisal of "going value" (p. 187). From the economic viewpoint, he criticises the prevailing distinction between "good-will" and "going value." The courts have come to interpret "going value" as the accumulations of deficiencies in a "fair return" arising from the necessity of creating and developing business. This is the so-called "Wisconsin method" of gauging "going value." It is really the application of the economic doctrine of sacrifice or the cost basis of value. Its underlying principle is the same as that which distinguishes investment expenditure from revenue expenditure. The distinction arises from the natural laws of trade, and volumes of economic theorizing cannot alter these actual conditions of facts.

Economic principles, in the long run, tend to harmonize with business practice and legal doctrines; otherwise, the science would become entirely metaphysical. Accordingly, the author, in trying to solve a practical business problem, such as rate regulation, may be as badly off as a blind man in a dark room looking for a black cat that is not there. Certainly, in the actual work of valuation there is much groping in the dark as to correct economic doctrines. The best evidence of this is Mr. Vanderblue's numerous citations of diverse opinions and theories. Conflicting ideas are expressed by the economists, the engineers, and the lawyers. The experts in the field are continually quarrelling among themselves and with each other. Many of the arguments presented at the formal hearings before the Interstate Commerce Commission (which are fully reviewed throughout the pages of Mr. Vanderblue's book) resemble scholastic quibbles.

Railroad valuation is not the most pressing problem (as stated by the author's publishers) but it is undoubtedly the most vexatious problem before the Interstate Commerce Commission. Mr. Vanderblue's scientific study is a masterful resumé of varied, un-

digested, unassimilated, and discordant views and data, but it does not clear the atmosphere nor lift the smoke of battle.

A. M. SAKOLSKI.

Valuation, Depreciation and the Rate-Base. By CARL EWALD GRUNSKY and CARL EWALD GRUNSKY, JR. (New York: John Wiley & Sons, Inc. 1917. Pp. viii, 387. \$4.00.)

Public Utility Rates. A Discussion of the Principles and Practice Underlying Charges for Water, Gas, Electricity, Communication and Transportation Services. By HARRY BARKER. (New York: McGraw-Hill Book Company, Ltd. 1917. Pp. xiv, 387. \$4.00.)

These two books appeared almost simultaneously, both by engineers with extensive practical experience with rate control. Their chief significance is that they bring out the chaotic conditions of regulation, the uncertainties and indefinitenesses of procedure after a generation of discussion of principles and policies, and after fifteen years of attempts at regulation. Nothing is more needed, both for the protection of the public and the welfare of the business, than a definite and sensible policy, which actually establishes control of return on investment, states the terms at which investors place their capital in the public service, and provides for desirable extension of service. Both books should contribute substantially toward the realization of such a policy.

The Grunskys' book is less a comprehensive and systematic discussion of valuation and rate making in accordance with present procedure than the presentation of particular views based on personal experience and study; and many suggestions that deserve special consideration are offered. There is commendable omission of numerous elementary commonplaces, but unfortunately particular points are uselessly repeated over and over and, in general, material, much of it irrelevant, is presented in a very disorganized fashion.

The plan may be briefly summarized as follows: Take as the rate base "the reasonable and proper investment or original cost new, including a proper allowance for the cost of establishing and developing the business" (p. 30); make no deduction for depreciation, nor an allowance for appreciation, and, in some cases at least, make a deduction for public contribution to the investment; then, in fixing rates, first allow just interest on the investment, then add to the rate of return for the volume of business

and give the investors a share in the general prosperity of the community.

As to the rate base, the authors present really two bases of valuation, although it is not clear that they are aware of the fact and realize its significance: (1) "the legitimate investment necessary to establish the business" (p. 155), and (2) the cost of constructing the property. The first looks upon historical fact and represents investors' direct sacrifice; the second looks to the present and makes an appraisal of the existing property. Apparently the authors have in mind the first and offer the second as a mere alternative statement. But the two cannot be used thus; they do not even represent equivalent quantities. I should agree that the investors' direct sacrifice is the most reasonable rate base, which, of course, would not be subject to depreciation or appreciation, for it would be a historical quantity not subject to modification. But it cannot be used, because in the ordinary rate case the legitimate actual just investment cannot be determined. The problem then is to find the most nearly equivalent *appraisal of present property*. And this, under normal circumstances, would not be the gross actual cost new, as presented by the authors, but this amount diminished by depreciation.¹

A chapter is devoted to showing that the actual life of property units in service does not agree with the probable life assumed in the depreciation allowance; some units are retired much earlier while others serve much longer; if then, depreciation charges are made according to any one of the standard formulas, the accumulation of funds will not agree with the replacement requirements. This is all true; but what seems to be given as the conclusion does not follow, that in place of depreciation there should be included in operating expenses the cost of replacement as retirements are made, and that therefore no deduction for depreciation should be made from cost new in an appraisal. Except for the largest and most varied properties, the policy of charging replacements instead of depreciation to operating expenses would not be practicable. If it could be and were followed generally, the authors' conclusion would, of course, apply to future investments; but it would not hold for the past when their theory was not followed, when rates to consumers were largely what the traffic would bear,

¹ For support of this view, see the reviewer's "Bases of Valuation in the Control of Return on Public Utility Investment," *AMERICAN ECONOMIC REVIEW*, vol. VI (Sept., 1916), pp. 570, 571, and 582 ff.

and when the property may or may not have been maintained according to reasonable standards. Not deducting depreciation from cost new would open the door for the inclusion in the appraisal of multitudes of items all but worthless, resulting in gross padding of the valuation.

It is urged that the investors should be given a share in the general prosperity, but that this be accomplished through an allowance of more than normal interest on investment rather than through the inclusion of appreciation in the rate base. Two questions are pertinent regarding this proposal: (1) How would the super-return be determined? (2) If there be additional return in lieu of appreciation, what corresponding adjustment for not deducting depreciation from the gross appraisal?

It is suggested also that additional returns be granted for volume of business. Again, how practically determine the super-rate? And, just why the allowance? Do the authors realize the real significance of a public utility and the purpose of regulation? We have to do with very important and almost universally necessary services; public service corporations and their control are merely the means of general coöperation for obtaining the services at least possible cost to the public. If this view be correct, then there is no reason for permitting additional returns for volume of business, nor for prosperity, except possibly for inducement to the best progressive management.

Turning to Mr. Barker's book, we find a more systematic discussion of the entire mechanism of regulation. It is perhaps the most orderly and generally comprehensive of the many engineering treatises on valuation and rate making. It offers no special formula of control; its purpose is mainly to analyze and describe existing procedure, and it succeeds very well. The discussion is carefully balanced, and it offers many excellent criticisms and suggestions. The author appears public-spirited, with possibly an over-confidence that his own state of mind is that of public service corporation officials. If space permitted, many minor points might be profitably discussed or criticized. On the whole, the book is an important addition to the literature on regulation, and should help in the formulation of more definite standards and procedure in valuation and rate making.

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Corporation Accounting. By R. J. BENNETT. Ronald Accounting Series. (New York: The Ronald Press Company. 1916. Pp. xxi, 563. \$2.70.)

This volume, as stated by the author in the preface, is concerned with "certain transactions, accounts, and entries employed in corporation accounting which are either peculiar to the corporation, or so seldom encountered elsewhere, that they may properly be termed distinctive."

Reading farther in the preface we are reminded that: "as stocks of differing characteristics are subscribed for, issued on varying terms, forfeited, donated, resold or cancelled; as bonds of different classes are issued, sold, purchased or redeemed at maturity; as sinking funds and reserves are set up for the protection and redemption of these bonds; as dividends are declared or assessments are levied; as companies are reorganized, liquidated, or become insolvent, the accountant is confronted with difficult problems—problems which frequently, because of the magnitude of the amounts involved, or because of the legal consequences of error, call for a care and accuracy of treatment beyond the ordinary."

The volume faithfully fulfils the intent of presenting adequate solutions and setting forth the established accounting practice for dealing with such problems. It is conspicuous for its systematic and orderly arrangement, beginning with the organization of a corporation and concluding with receiverships and dissolution. The exposition and the illustrative material have been prepared with a commendable thoroughness, no doubt reflecting the author's experience as a teacher of accountancy. Indeed, it seems hardly possible that such a completeness of detail could have been developed in any other way.

A work on corporation accounting provides an opportunity for extended comments on such matters as charters, by-laws, notices of meetings, corporate records, and numerous other details which are not literally a part of an accountant's duties. Owing to the fact that the same individual will in many corporations serve as secretary as well as an accountant or treasurer, these comments in regard to procedure will be to many readers just as interesting and valuable as the details in regard to accounting. There are necessarily many references to corporation law, and although the practice and the rules are generally well established in regard to the points mentioned, references to legal authors or decisions would add authority to many of the author's statements.

Throughout the volume the reader encounters the familiar and helpful device of hypothetical corporations which exist only on the author's pages, and solely for the purpose of illustrating his views. But Mr. Bennett has given added authority and interest to many of his observations by frequent citations from some of the best known corporations in the United States, such as The Pennsylvania Railroad, Packard Motor Car Company, Victor Talking Machine Company, Royal Baking Powder Company, and others.

In the preface and throughout the volume there is abundant recognition of alternatives of procedure. The author explains and usually illustrates all the different ways in which the accounting entries may be made and indicates what is thought to be gained by one course or another. The accounting theory which appears in the volume is sound and yet never dogmatic.

A feature of this volume which other authors might follow to advantage when opportunity permits, is the incorporation of extended quotations from well-known authors on special topics. Thus Mr. Bennett has arranged to reproduce a long quotation on "Bond discount and premiums" from Mr. A. Lowes Dickinson's well-known volume *Accounting Practice and Procedure*, and refers his readers to Charles E. Sprague's *The Accountancy of Investments* for details on sinking fund calculations, and to Robert H. Montgomery's *Auditing Theory and Practice* for details of audit procedure and reports.

Basing his opinion on a fairly wide acquaintance with the literature of accountancy published in English, the reviewer would state that Mr. Bennett's volume will come to take rank with the three well and favorably known volumes mentioned in the preceding paragraph as among the first ten or a dozen titles that should be owned by every one seriously interested in accountancy. The arrangement of the book makes it readily adaptable for general reference by corporation officers and accountants. As the author no doubt intended, it can be used to advantage in a class of advanced accounting studying corporation forms and problems.

When a new edition is prepared, it is to be hoped that more systematic and thorough attention will be given to the index, for, excellent as it is, it proved disappointing to the reviewer on several references, some of which should obviously appear in their proper alphabetical order.

CLINTON H. SCOVELL.

NEW BOOKS

- ANDERSON, DE L. & Co. *The accounting treatment of overhead construction costs in public utilities.* (New York: The author. 1917. Pp. 20.)
- ARONSON, S. *Selling your services.* (New York: Sales Service Co. 1917. Pp. 176. \$1.)
- ARTHUR, W. *Estimating building costs.* (New York: David Williams Co. 1917. Pp. 211.)
- BAYLE, F. *Les salaires ouvriers et la richesse nationale. La méthode Taylor et le salaire moyen. Premiers éléments d'une théorie du salaire. Application à la fabrication du matériel de guerre.* (Paris: Dunod & Pinat. 1917. Pp. 216. 6.50 fr.)
- BRADLEE, S. G. *Stock brokers' daily balance interest table.* (Boston: Financial Pub. Co. 1917. Pp. 95. \$7.50.)
- CHILDS, F. H. *A treatise on American business law, with illustrative cases.* In six volumes. Vol. 2, *Agency; partnership.* (Chicago: Walton School of Commerce. 1916. Pp. 725.)
- CRAMER, J. A. *The filing department.* (New York: Bankers Pub. Co. 1917. Pp. 110. \$1.)
- DERRICK, P. E. *How to reduce selling costs.* (London: Newnes. 1917. Pp. xviii, 221.)
- ETTINGER, R. P. and GOLIEB, D. E. *Credits and collections.* (New York: Prentice-Hall. 1917. Pp. 390. \$2.)
- GERSTENBERG, C. W. *The law of bankruptcy.* (New York: Prentice-Hall. 1917. \$2.)
- GILLEN, M. J. *Plan for establishing the base cost and the profits of American producers and suppliers of war goods.* (Racine, Wis.: The author, Mitchell Wagon Co. 1917.)

Two pamphlets containing what the author considers a simple and practical remedy for establishing the base cost and the profits for government purchases of war goods. The plan also provides for "an organization which will immediately marshal the resources of the nation, prevent confusion, provide immediate delivery of things now wanting, and save this nation hundreds of millions of dollars and at the same time immeasurably strengthen our national position at home and abroad." As a statement of the problem the proposal merits consideration, but the remedies submitted involve such comprehensive changes in the machinery of our government that their practical value is of rather doubtful significance.

M.J.S.

- GOWIN, E. B. *The executive and his control of men.* (New York: Macmillan. 1916. Pp. xv, 349. \$1.50.)

Professor Gowin presents a very able treatise on the character and make-up of the executive and his relation to superiors, subordi-

nates, and the public at large. He shows that, with the increasing size of industrial units and the growing complexity of surrounding communities, the problems confronting the executive are constantly demanding greater skill and more attention to underlying principles of human life. The book is divided into three parts: I, Individuality; II, Motivating the Group; III, Limits upon the Executive.

Part I shows in seven chapters the role which individuality plays in the success of executives. Examples are taken to show the energy and physical characteristics of leaders of all time. Physical size and power, a peculiar knowledge of just when and where to use all the powers in one's possession, stimulus in environment, emotion, originality, and alertness are shown to have an important bearing on the measure of a man's possibilities. These must be efficiently applied through the medium of organization and labor saving devices.

Part II gives different methods of transfusion of stimulus or motivating the group. Personality serves as a basis, surrounded by numerous devices such as art, illusion, discipline, and rewards appealing to the natural human tendencies of imitation, suggestion, emulation, and the unique but powerful agency of idealism. By the skilful combination of these elements, the leader becomes unified with or the impersonation of the cause. He, a man of optimism and enthusiasm, has pointed toward the heights and bade men transcend the limitations which pure reason would dictate. He demands much and he gets it. Expectation justifies itself by its fruits.

Part III outlines the limits placed upon the executive and the care he must take not to overstep the bounds nature has built up around mankind. His subordinates are not mere puppets and as a class, they instinctively oppose progress. He cannot be effective and be a generation ahead of his time. Competition comes in to dictate policies and force the executive from his predetermined path. Here also is illustrated from history the comparative youth of leaders in times of stress as against a peaceful era. The effectiveness of the executive is largely in proportion to his adaptability to changing circumstances, to the quickness and smoothness with which he associates himself with new conditions, and to his ability to obtain results without incurring a damaging opposition.

The whole work is marked by a keen insight, an uncommon penetration beneath the surface. It combines theory and practice, or, better, science and practice in a rather unusual way. It is a book which should commend itself to any who aspire toward positions of authority.

HARRY H. KING.

HAYES, P. L. *The bookkeeping teacher; a treatise on the science of double entry bookkeeping.* (Springfield, Mo.: The author. 1917. Pp. 126. \$6.)

HEWES, L. I. and GLOVER, J. W. *Highway bonds. A compilation of data and an analysis of economic features affecting construction and*

maintenance of highways financed by bond issues, and the theory of highway bond calculations. Bulletin no. 136. (Washington: Dept. Agri. 1916. Pp. 78.)

HUFFCUT, E. W. *The elements of business law.* Revised by G. G. BOGERT. (Boston: Ginn. 1917. Pp. 319. \$1.12.)

KERR, E. *The effect of wars and revolutions on government securities, external and internal.* (New York: William Morris Imbrie & Co. 1917. Pp. 131.)

KIX-MILLER, W., editor. *Story case-business law. A systematic non-technical treatment of business law in story and case form.* (Chicago: Commerce Clearing House. 1916. 7 vols. \$24.50.)

LEVY, F. F., compiler. *Universal sinking fund hand book.* (New York: Fabian Franklin Levy. 1917. Pp. 393.)

LOUGH, W. H. *Business finance. A practical study of financial management in private business concerns.* (New York: Ronald Press. 1917. Pp. xiv, 631. \$3.)

To be reviewed.

McJOHNSTON, H. *Business correspondence.* (New York: Alexander Hamilton Institute. 1917. Pp. xv, 328.)

MARTIN, M. *Advertising campaigns.* (New York: Alexander Hamilton Institute. 1917. Pp. xvii, 338.)

MINTURN, J. A. *Price-regulation under patents.* (Indianapolis: Minturn & Woerner. 1916. Pp. 56. \$1.)

MOODY, J. *Moody's analyses of government and municipal securities.* (New York: Moody's Investors Service. 1917. \$15.)

MORGAN, H. E. *Business organisation.* (London: E. Nash. 1916. Pp. viii, 253. 5s.)

NYSTROM, P. H. *Retail store management.* (Chicago: LaSalle Exten. Univ. 1917. Pp. viii, 242.)

This textbook on store management was prepared to meet "the demand among retail store workers, managers, and employees" for a treatment of "the essential principles and facts concerning the location, equipment, organization, and management of a store." It deals with retailing in general and proposes principles which apply to big and little stores equally. No attempt is made to treat retailing theories still under experimentation, but only proven theories. There are developed such matters as the location of stores, the organization of the buying, selling, and accounting departments; the question of store policies; and the employment problems—finding good employees, remunerating, educating, and caring for them. It is designed for use as textbook, is in very simple style, and each chapter is followed by a list of questions bringing out the data of the chapter section by section.

Retail Store Management is closely related to the author's other books, *Retail Selling and Store Management* (Appleton, 1914) and

The Economics of Retailing (Ronald Press, 1915). The Appleton text gives 125 pages to the theory and practice of selling, which subjects are not treated in the other two texts; but the latter part covers many of the same topics found in the LaSalle text: *e.g.*, store policies, buying a retail store, relation of salesmen to employer and to public, etc. The Ronald text devotes 68 pages to an introduction showing the position and importance of retailing in our distributive system; the second group of topics is the expense of retailing, rent and location, store-wages, and prices; the third division treats the relative competitive advantages of the department stores, chain stores, and mail-order houses; and it closes with a discussion of some economic problems such as price maintenance, retail store failures, public regulation of retailers, and the oft-raised question, "Are there too many retailers?" The Ronald text is written for students of economics, has a more scholarly style and content, and is not so exclusively expository as the other two; it interrelates the practices of retailers with the principles of economics and contributes to that rapidly developing field of economics—marketing. Taken together, Dr. Nystrom's books constitute no small part of the recent useful literature of modern retailing. The Appleton text is bipartite and makes the three repetitive; the portions on store management should be transferred to the LaSalle text and the three texts would then have more or less exclusive fields.

RAY BERT WESTERFIELD.

- PARKHURST, F. A. *Applied methods of scientific management*. Second edition. (New York: Wiley. 1917. Pp. 337. \$2.)
- PARSONS, C. C. *Office organization and management*. (Chicago: LaSalle Exten. Univ. 1917. Pp. xiv, 313.)
- ROSS, G. E. *Cost keeping and construction accounting, adapted to any work consisting of numerous items, departments or divisions on which detailed unit costs are desired*. (Salem, Oregon: George Edward Ross. 1917. Pp. xiv, 59. \$1.25.)
- SELDEN, G. C. *Investing for profit*. Second edition. (New York: Magazine of Wall St. 1917. Pp. 173. \$1.)
- STEVENSON, R. A. *Municipal accounting*. University of Iowa Extension bulletin no. 22. (Iowa City: Univ. of Iowa. 1916. Pp. 24.)
- SWINNEY, J. B. *Merchandising*. (New York: Alexander Hamilton Inst. 1917. Pp. xxi, 355.)
- THOMPSON, C. B. *The Taylor system of scientific management; a report, in manual form, on the accomplishments of scientific management, supplemented with a discussion of how to secure some of the most important of these accomplishments*. (Chicago: A. W. Shaw Co. 1917. Pp. 175. \$10.)
- WAHLSTAD, P. P. *Credit and the credit man*. (New York: Alexander Hamilton Inst. 1917. Pp. xviii, 342.)

WALKER, W. H. *Corporation finance*. (New York: Alexander Hamilton Inst. 1917. Pp. xv, 346.)

The administration of estates and trusts. (New York: United States Mortgage & Trust Co. 1917. Pp. 46.)

America's changing investment market. Edited by E. M. PATTERSON. (Philadelphia: Am. Acad. Pol. & Soc. Sci. 1916. Pp. ix, 342.)

Burnham's manual of Chicago securities, 1917. An investor's handbook of useful information concerning the principal securities bought and sold in Chicago and the Middle West. (Chicago: J. Burnham & Co. 1917. Pp. 442.)

Michigan manual of corporation statistics, 1916. (Detroit: Michigan Manufacturer and Financial Record. Pp. 255.)

Issued under the direction of the Detroit Stock Exchange to provide a standard handbook of the securities which have been validated by the Michigan Securities Commission. It includes the text of the act of 1915 requiring the supervision of all issues of stocks and bonds of corporations offered for sale in Michigan; data relative to securities authorized by the Michigan Railroad Commission; and a table giving the capitalization, surplus and undivided profits of all Michigan banks.

Practical coöperation in the real estate and general brokerage business; how to become an efficient real estate agent and general broker. (Los Angeles, Cal.: Maedonald Coöperative Realty Co. 1917. \$25.)

Railroad bond issues officially regarded as legal investments in the state of New York, as of January first, 1917. Second edition. (New York: Wood, Struthers & Co. 1917. Pp. viii, 201.)

Scientific management; a list of references in the library. (New York: New York Public Library. 1917. Pp. 81. 25c.)

Thrift by household accounting and weekly cash record forms. Published for the Ellen H. Richards memorial fund by the committee on household budgets. (Baltimore, Md.: American Home Economics Assoc. 1916. Pp. 34. 15c.)

Capital and Capitalistic Organization

The Morals of Monopoly and Competition. By HOMER BLOSSER REED. (Menasha, Wis.: George Banta Publishing Company. 1916. Pp. 141. \$1.25.)

The thesis of the author—a professor of philosophy—is that our moral concepts, so far as these are embodied in judicial opinion, are gradually modified by changes in the economic environment; and he illustrates this proposition by describing the development of the moral law in the period of transition from a competitive régime in industry to a monopolistic one.

The competitive régime in industry represented a reaction against the monopolistic régime which had preceded it. The public had become weary of the monopolies granted by the Crown, and therefore welcomed the new order. The competitive system, moreover, had many advantages. It tended to develop efficiency in production; for the inefficient who could not produce with a profit at a competitive price were perforce eliminated. It also offered full range to individual initiative and enterprise. It is true that the competition was often keen, and resulted in special favors to certain customers or in undue vaunting of one's wares. But so long as the competitors had approximately equal resources, this worked no special injury. As a result, competition came to be regarded as the "life of trade." And gradually the current notions as to what was moral under a state of competition became definitely crystallized in the common law.

But with the development of larger units in production and of combination the situation changed. It was then seen that a combination possessed of ample capital might, by means of railroad rebates or local price cutting, destroy a smaller competitor, perhaps of equal or greater efficiency in production. We then begin to hear of "unfair competition" and "predatory competition." The current use of these phrases indicates that a moral consciousness was being aroused. The combination, though it had merely carried out the "good old-fashioned laws of competition," was commonly dubbed an Octopus. Which merely means that the current ideas as to what was moral had changed to meet the new economic conditions. And the courts, though they will eventually give full recognition to the new state of affairs, have done so but haltingly. It is this failure of our ethical concepts as embodied in the law to develop as rapidly as economic conditions that accounts, according to the author, for the existence of a trust problem.

The author also predicts that the large industrial combinations (he does not make it clear whether he refers solely to monopolies or to all combinations) will in the course of time come to be recognized as public service corporations, and will be subjected to regulation in much the same way that the railroads now are. But he does not make his point. Though he recognizes fully the potency of unfair methods of competition (he gives quite a number of pages to illustrations of unfair competition), he presents no argument to show that the prevention of unfair competition by law and by the elevation of morals will not lead gradually to the restor-

ation of competitive conditions where these have been destroyed by unfair tactics. While the author may be right in his opinion as to the permanence of industrial monopoly—he is not alone, of course, in his belief—this is a matter upon which it is unwise to adopt a cock-sure attitude, particularly in view of the many opposing considerations. It is generally the case that the more deeply one delves into a controverted question, the more unwilling he becomes to enter into the hazardous realm of prediction.

ELIOT JONES.

Leland Stanford Junior University.

Some Legal Phases of Corporate Financing, Reorganization and Regulation. By FRANCIS LYNDE STETSON, JAMES BYRNE, PAUL D. CRAVATH, GEORGE W. WICKERSHAM, GILBERT H. MONTAGUE, GEORGE S. COLEMAN, and WILLIAM D. GUTHRIE. (New York: The Macmillan Company. 1917. Pp. ix, 389. \$2.75.)

The book is a series of essays by legal authorities, obviously written for younger members of the bar. As such it deals with particular problems in the peculiarly narrow and intensive manner of legal procedure. This is its great merit, but it is also the reason why the broader economic aspects of the problems treated are either totally disregarded or else disposed of with only a few phrases. Yet within their field of legal literature most of these essays are remarkably comprehensive; in fact, several of them, notably Cravath's on reorganizations, are certainly unrivaled in the sphere of legal finance.

The chapters may be conveniently divided into two sections. The first covers certain topics of corporation finance and the second certain questions arising out of the public regulation of corporations. They are of unequal merit, the essays of the earlier part being on the whole superior and more carefully prepared.

The book opens with Stetson's Preparation of Corporate Bonds, Mortgages, Collateral Trust and Debenture Indentures. Unquestionably so much comprehensive information on this topic cannot be found anywhere else. It deals with the structure of mortgages and similar instruments of essentially large corporations. It has the somewhat uncritical point of view of one who would justify, in all respects, the present forms. In that sense it is unsympathetic with that movement which would simplify and shorten corporate instruments and rely more on an established body of judicial and

public opinion than on legal phraseology. The old New York and Erie mortgage of 1847, short and unscientific to the thinking of a Wall Street lawyer, has stood the test of several reorganizations and the bonds issued under it are probably as sound as any corporate obligation in existence. The strength of a mortgage or debenture is property, earning power, and that force of judicial and public opinion which insists on a corporate morality independent of and above legal quibbles.

Byrne's essay on the Foreclosure of Railway Mortgages is a very keen yet comprehensive summary of current practice. It contains the best short statement of that knotty problem, the treatment of unsecured claims, which the present reviewer has ever seen. It is best because it sees *Fosdick vs. Schall* in true perspective, neither as a "bugbear" nor as "fundamental law."

Were I to single out the essay which most impresses me as that of a master it would be Cravath on The Reorganization of Corporations. There is no more perplexing field in the whole range of corporation finance, and the author of this essay nowhere shows himself more a keen student of the subject than when he naïvely comments, "Plans of reorganization are rarely strictly logical." The trouble with most writers on this subject is that they either despair of seeing order—their accounts degenerating into a mere patchwork of ephemeral and unrelated cases—or else they seek to become "general" with the result that their generalizations are so amateurishly superficial as to be utterly worthless. This essay does neither. It shows a thorough and painstaking working over of the written material amplified in addition by the writer's acknowledged practical familiarity. It is well written according to a clearly defined method of presentation, not a mere unorganized patchwork of notes with which some "busy practical men" insult their audiences. Penetrating and comprehensive as is the essay it has nevertheless the bias of the legal profession. The author does not give the economic and social (and often personal) elements that underlie any reorganization their proper perspective. Moreover he is apt to bring into bold relief transient and perhaps ephemeral decisions as if they were final. He is quite as worried over the Boyd case as was the late A. H. Jolie over the Monon case when the latter delivered the now classic lectures on reorganization before the Harvard Business School.

Mr. Wickersham's essay on the Sherman Anti-Trust Law is somewhat of a disappointment, in the light of the writer's sin-

gularly wide familiarity with its workings both from within and without. While all that is said is true enough (and has been said many times before) it contains no enlightening insight into the subtle current of judicial opinion, swerving in one direction and then another, which if understood aright helps to predict the future. For illustration, Wickersham suggests, as everyone knows, the fundamental and vitally important difference between the majority and minority opinions in the *Harvester* case, but a study of the writer's survey of the cases, from *Knight* to *Nash*, gives us no suggestions as to how the court might reason in this particular issue. Yet this very point is now the most important issue within the field. Furthermore, like many lawyers, he is blind to the economic and social background which explains, much better than legal subterfuges, the reason why the minority opinion in the *Knight* case later became law and why the 'spirit of Holmes's dissenting opinion in the *Northern Securities* case has had such an abiding influence.

Montague's discussion of the Federal Trade Commission and the Clayton act leaves a very indecisive impression. The application of these acts is of the future and there is little precedent from which to construct theories of established policies.

Coleman's essay entitled *The Public Service Commission* is superficial and scrappy. His laudatory attitude toward the ability of the average commissioner has blinded his critical sense; and his eulogy of the personnel of the New York First District Commission is almost humorous. Guthrie's essay on the same subject, on the other hand, is a refreshing criticism of the mere bureaucratic authority of commissions. He deplures, as all students of the subject must, the utter lack of technical or special training usually at the command of appointees to public service bodies. The root of the evil is, of course, politics and political debts. Into the hands of a "lame duck" senator or a country lawyer without a practice the transportation of the country is cast by the law, bound hand and foot. Every year, in the real interest of public welfare, the number of commissions is increased, with added burden to the public treasury only to degenerate into snug harbors for political refugees.

ARTHUR S. DEWING.

NEW BOOKS

BURNETT, D. F. *Cases on the law of private corporations, selected and*

supplemented with notes. (Boston: Little, Brown. 1917. Pp. xxix, 828. \$5.)

GERSTENBERG, C. W. *Organization and control.* (New York: Alexander Hamilton Inst. 1917. Pp. xviii, 351.)

Organization and Control deals not with the internal management and control of business units, as the title might indicate, but rather with the external organization and ownership of industrial enterprises and the control of their business policies. In other words, this is not a work on business management, but on the structure of the business unit. It deals with the relationships that exist among the various interests therein, and the distribution of the incidents of ownership under the various forms of industrial organization that have been used "among English-speaking people."

The book approaches the subject largely from the legal standpoint, although there is nothing of a technical legal nature in the content. It is obvious, however, that the author considers the legal rights and obligations of the parties to the business unit as the essential thing for the student to grasp. This feature is emphasized especially in the problem questions which close each chapter and which help to make the book especially valuable as a text for class-room work. These two features (the emphasis on the law of business enterprises and the problems) are the most strikingly characteristic marks which the book possesses. In the first, Mr. Gerstenberg betrays his legal training and interest, while in the second he reflects the opinion of the experienced teacher.

There is but little that is new in the treatise, apart from the problems referred to above. It is, from the very nature of the subject, a description of facts and relationships which exist rather than a speculative treatment of something which ought to exist. But it presents the subject in a remarkably clear and readable manner, illuminates the material with a number of well-selected business forms, and arouses interest by suggestive questions on hypothetical corporate problems.

The closing chapters of the book deal with the questions growing out of concentration and combination in business. In them the author examines the causes that have led up to the present high degree of centralized control, traces the evolution of the "trust" through the various forms which it has taken and outlines the advantages resulting from industrial consolidation. Illegal combinations are discussed and the book closes with a history of the law of monopolies and an analysis of recent legislation on the trust question.

FLOYD E. ARMSTRONG.

HEATH, H. M. *A manual of Maine corporation law, containing the statutes regulating business corporations, a digest of these statutes, and the principal corporation forms used in Maine.* Second edition, revised and enlarged. (Portland, Maine: Loring, Short & Harmon. 1917. Pp. xv, 340.)

OBERREICH, L. H. *Control of corporate finance.* Bulletin no. 10.

(Indianapolis, Ind.: Indiana Bureau of Legislative Information. 1917. Pp. 66.)

Prepared at the request of Governor Ralston of Indiana in order to assist the general assembly in preparing for the enactment of a blue sky law. Embodies a review of certain flagrant corporate abuses and a brief syllabus of the remedies suggested to meet them.

STRAUSS, F. *The modern underwriting syndicate*. (New York: The author, Care of J. & W. Seligman & Co. 1917. Pp. 29.)

WOOD, W. A. *Organization and management of corporations with forms*. New revised edition. (Indianapolis: Bobbs-Merrill. 1917. \$4.)

Business corporations under the laws of Delaware; shares without par value. Fourth edition, revised to include 1917 legislative changes. (Wilmington, Del.: Corporation Trust Co. of America. 1917. Pp. 32.)

Commission leaflets (nos. 47-53 inclusive) containing selected commission decisions, November, 1915-May, 1916. (New York: American Telephone & Telegraph Co. 1917. Pp. lxx, 1568.)

Public utilities reports annotated containing decisions of the public service commission and of state and federal courts. 1917. A. (Rochester, N. Y.: Lawyers Coöperative Pub. Co. 1917. Pp. lxxii, 1263. \$5.)

Special commission to consider the financial condition of the Boston Elevated Railway Company, proceedings July 21-Dec. 27, 1916. House doc. no. 1875. (Boston: 1917. Pp. 354.)

Labor and Labor Organizations

Conditions of Labor in American Industries. A Summarization of the Results of Recent Investigations. By W. JETT LAUCK and EDGAR SYDENSTRICKER. (New York: Funk and Wagnalls Company. 1917. Pp. xi, 403. \$1.75.)

The authors have done a valuable service in bringing together in conveniently accessible form a large amount of statistical material bearing on the economic status of the wage-earner. The book, we read in the introduction, "is a statement, rather than a description of some of the fundamental conditions of labor in modern industry in the United States, which, it is hoped, will prove useful to the student, be he in the classroom or in his vocation, employer or employee, business man, social worker or legislator."

The main emphasis throughout is laid on the income of the wage-earner and the question of its sufficiency from the standpoint of maintaining adequate standards of living. One chapter sets forth the existing statistical data on individual wages and earnings,

another is devoted to family incomes, and the final chapter in the book is a discussion of the adequacy of the wage-earner's income.

The two chapters on unemployment are of course related closely to the question of sufficiency of earnings. The same subject is in the foreground in the chapter on Living Conditions, while in the discussion of the wage earner's health we are continually reminded that health is "purchaseable" and that low wages makes it difficult to maintain health standards. This leaves only chapter 1, *The Labor Force*, and chapter 5, *Working Conditions*, where income is not the dominant note.

The statistical data presented—most of which was gathered for the United States Commission on Industrial Relations—are quite extensive and taken principally from the United States census, general and special studies made by the United States Bureau of Labor, the report of the United States Immigration Commission of 1908-1909, reports of various state bureaus, minimum wage commissions, and reports of private investigators. No attempt is made to estimate the effect of the rapid changes in rates of wages during 1915 and 1916, because of the absence of any sufficiently authoritative information on the subject and because the permanency of these changes is regarded as "problematical."

On the basis of inquiries made prior to 1914 the authors conclude that a third of the adult male workers of the country earned less than \$400 annually, and two thirds less than \$600, while a fourth of the women workers earned less than \$200 and two thirds less than \$400. It is estimated that the "average" wage-earner loses from 10 to 20 per cent of his possible working time during the year, including a loss of nine days on account of sickness.

There is very little new material in the book. Its purpose, on the contrary, was to make easily available existing material, and this the authors have done in a painstaking manner. Particularly valuable are the discussions of unemployment, its causes and effects; family income; and the health of the worker.

The chapter on *Working Conditions* is less satisfactory, partly because the space allotted to it is too small for adequate discussion of the subject and partly because of errors in statement. There is no discussion of the attitude of the courts toward laws regulating hours of labor, beyond a single sentence which was of doubtful accuracy when written, and which on account of the recent decisions on the Adamson law and the Oregon 10-hour case has been rendered wholly contrary to fact.

The statement in this chapter that "only one large operator in the bituminous region has succeeded in remaining non-union" disregards the fact that there are several bituminous regions and that in at least four of them—Western Pennsylvania, West Virginia, Alabama, and Colorado—there are non-union operators with extensive interests, including the H. C. Frick Coke Company, the Tennessee Coal, Iron and R. R. Company, and the Colorado Fuel and Iron Company—to name but few.

The official opposition of the American Federation of Labor to restrictions in hours of labor by law is inaccurately ascribed to the violent opposition of the majority to everything proposed by the socialist group. As a matter of fact, when the matter first came up, in the Philadelphia convention in 1914, it was the non-socialistic Pacific Coast delegation that made the strongest fight for the principle of eight hours by law.

It is unfortunate that so little attention is paid to unionism and collective bargaining in this book on conditions of labor. There is an enumeration of unions and a statement as to their membership but no discussion of their tactics or the part they play in making industrial history. There is a brief statement that organized labor is "without exception opposed to welfare work of every kind," an inference which is quite misleading, especially in view of the authors' rather comprehensive definition of welfare work.

Perhaps the chief weakness of the book is the tendency to dogmatize from insufficient data. One very impressive thing about the statistical exhibit is the fact—as all students of labor conditions know—that we are sadly lacking in authoritative statistics of earnings. What we have may justify us in coming to conclusions in the main quite similar to those of Messrs. Lauck and Sydenstricker. It is not safe, however, to speak with much assurance, especially when the main dependence, as in this book, is on the report of the Immigration Commission. The wages data in that report were gathered in the panic year of 1908 and for some of the industries covered are obviously unrepresentative. Furthermore, the number of individuals included, in some industries, was relatively so small that generalizations for the industry seem to lack justification.

One can agree with the authors, however, in their conclusions that the earnings of heads of families have been in many industries and for millions of wage-earners too low to admit of a standard of living that would afford the maintenance of health and satisfactory

conditions of living. The fact that the authors deplore this situation makes it the more surprising that they themselves fix upon \$800 as an income that will maintain for the average workingman's family "a standard of living that, with ordinary frugality, will allow provisions for separate and decent existence, health, and a modicum of reasonable comfort" (p. 368). The authors are themselves so much in doubt about the adequacy of this sum that on the very next page they make it read \$800 or \$900. At the same time they quote conclusions both of Chapin and of the Children's Bureau that indicate pretty clearly that \$800 is not enough to maintain a normal standard. Estimates of a minimum "living wage" will never be worth very much until the calculators give the benefit of the doubt to the human factors involved instead of to the payroll.

It is to be hoped that a second edition of the book may be required in order that an opportunity may be afforded the authors to correct the many errors of lesser consequence, which are plainly due to hasty proof reading.

JOHN A. FITCH.

NEW BOOKS

- AMAR, J. *Organisation physiologique du travail*. (Paris: Dunod & Pinat. 1917. Pp. 374. 18 fr.)
- ANDREWS, J. B. *Anthrax as an occupational disease*. Bulletin of the United States Bureau of Labor Statistics, whole no. 205; Industrial accidents and hygiene series, no. 10. (Washington: Superintendent of Documents. 1917. Pp. 155.)
- ATKINSON, H. A. *Arbitration in industrial disputes*. (Philadelphia: Am. Baptist Pub. Soc. 1917. Pp. 16.)
- CLOPPER, E. N. and HINES, L. W. *Child labor in the sugar-beet fields of Colorado*. (New York: National Child Labor Committee. 1917. Pp. 30.)
- COMBAT, E. and F. J. *Le travail des femmes à domicile, 1914-1916*. (Paris: Berger-Levrault. 1917.)
- FYFE, T. A. *Employers and workmen under the munitions of war acts, 1915-1916*. Second edition. (London: Hodge. 1916. Pp. 269. 10s. 6d.)
- REELY, M. K. *Selected articles on minimum wage*. Debaters' handbook series. (White Plains, N. Y.: Wilson. 1917. Pp. 202. \$1.35.)
- SELEKMAN, B. M. *Industrial disputes and the Canadian act. Facts about nine years' experience with compulsory investigation in*

- Canada.* (New York: Russell Sage Foundation. 1917. Pp. 42. 20c.)
- SUMNER, H. L. and HANKS, F. E. *Administration of child labor laws. Part 2, Employment-certificate system, New York.* Bureau publication no. 17. Industrial series no. 2, part 2. (Washington: U. S. Dept. of Labor, Children's Dept. 1917. Pp. 164.)
- VAN KLEECK, M. *A seasonal industry. A study of the millinery trade in New York.* (New York: Russell Sage Foundation. 1917. Pp. x, 276. \$1.50.)
- DE VESSELITSKY, V. *The home worker and her outlook.* (London: Bell. 1917. Pp. 118. 2s.)
- WALTER, H. R. *Munition workers in England and France; a summary of reports issued by the British Ministry of Munitions.* (New York: Russell Sage Foundation. 1917. Pp. 48. 20c.)
- WEBB, S. *The restoration of trade union conditions.* (London: Nisbet. 1917. Pp. 109. 1s.)
- WEISMAN, C. *Studies in vocational diseases: the effect of gas-heated appliances upon the air of workshops.* (Washington: Public Health Service. 1917. Pp. 84.)
- WEYFORTH, W. O. *The organizability of labor.* Johns Hopkins University studies in historical and political science, series XXXV, no. 2. (Baltimore: Johns Hopkins Press. 1917. Pp. 277.)
- To be reviewed.
- Final report of the United States Commission on Industrial Relations; including the report of Basil M. Manly, director of research and investigation, and the individual reports and statements of the several commissioners.* (Washington: Superintendent of Documents. 1917. Pp. 269.)
- The longshoremen's strike. A brief historical sketch of the strike inaugurated on June 1, 1916, in Pacific coast ports of the United States.* (San Francisco: Waterfront Workers' Federation. 1917.)
- Proceedings of thirty-third annual convention of Ohio State Federation of Labor, held in Toledo, Ohio, October ninth to thirteenth, nineteen sixteen.* (Cincinnati: Thomas J. Donnelly, Typographical Union. 1917. Pp. 124.)
- Report of the Department of Labour for the fiscal year ending March 31, 1916.* (Ottawa: Dept. of Labour. 1917. Pp. 121. 10c.)
- The unemployment problem, cause and cure, by "Analyticus."* (Schenectady, N. Y.: Sociology Club. 1916. Pp. 170.)
- Arbetstidens längd vid frisersalonger och badinrättningar i sverige.* (Stockholm: Norstedt. 1916. Pp. 130.)
- Skogsarbetarnas levnads- och arbetsförhållanden i Varmland, Dakarma, och Norrland.* (Stockholm: Isaac Marcus. 1916. Pp. 244, 399.)

Money, Prices, Credit, and Banking

NEW BOOKS

ANTHONISZ, J. O. *Currency reform in the Straits Settlements*. (London: R. W. Simpson & Co. 1917.)

BAKER, C. *Federal reserve manual*. (Philadelphia: National Bank News. 1917.)

FAVRE, J.-E. *Le capital français au service de l'étranger*. (Paris: Bibl. Financière. 1917. Pp. liv, 270. 3.50 fr.)

FOSTER, M. B. *Banking*. (New York: Alexander Hamilton Inst. 1917. Pp. xvi, 348.)

To be reviewed.

GILBERT, E. *The United States half cents. From the first year of issue, in 1793, to the year when discontinued, 1857*. (New York: Elder Numismatic Press. 1916. Pp. 32. \$3.50.)

HAM, A. H. *Interest tables for small loans*. (New York: Spectator Co. 1917. Pp. iv, 52. \$4.)

These tables were "prepared to meet the demand on the part of small lenders on chattle mortgages and wage assignments, pawn-brokers, credit unions and other small money-lending agencies for Interest Tables at certain rates of interest, on certain amounts and for certain periods of time not covered by the usual bond and interest tables."

The tables are concerned with loans for short periods of time as well as for small amounts, and are on a simple interest basis. The amount of interest is given to a degree of accuracy often called "the value to the nearest cent." In thus expressing results to cents a question arises as to what criterion shall be adopted when the result is midway between two round numbers expressed in cents. Thus on page 1, we note that the interest (.025) on \$5 for 15 days at 1 per cent per month is recorded as .03. Other examples of the same kind may be drawn from the same page. To record, in such a case, .03 rather than .02 accords with the commercial practice of counting the half cent as a whole cent in a final result. But at some other parts of the tables this idea is not carried out, and it is not clear to the reviewer what criterion has been used. Thus on page 28 the interest (.625) on \$25 for 1 month at $2\frac{1}{2}$ per cent is given as .62 rather than .63, while on page 29 the interest on \$25 for 1 month at $2\frac{1}{2}$ per cent is given as .63. In considering this point of adjusting values by neglecting a fraction of a cent equal to or less than one half, we may note, from page 1, that the tabular interest on \$10 is equal to double that on \$5 in only 15 of the 30 cases recorded. From page 2 we note that the tabular interest on \$40 is double that on \$20 in only 10 out of 30 cases. A difference of one cent in the interest is, of course, a small matter if we are dealing with large sums, but with a small principal the relative error may be very significant.

In addition to the tables certain formulas are given in the book for

determining the annual interest rate, amount of interest charge, annual discount rate, and amount of discount on loans payable in equal periodic instalments computed on unpaid balances and *not compounded*. Information given by the results from these formulas is useful because we are, in general, accustomed to regulate interest rates when expressed on an annual basis. It is important to emphasize that the formulas imply no compounding of interest. That is to say, the formulas apply strictly to the case of no investment of interest until the ends of years.

These tables will no doubt be of considerable service for the particular purposes for which they have been prepared, including the regulation by law of small loan business.

H. L. RIETZ.

HAYWARD, W. R. *Money: what it is and how to use it*. (Boston: Houghton Mifflin. 1917. Pp. 161. 80c.)

MANNING, J. H. *Century of American savings banks*. (New York: B. F. Buck & Co. 1917. 2 vols.)

PATTERSON, E. L. S. *Domestic and foreign exchange*. (New York: Alexander Hamilton Inst. 1917. Pp. xv, 298.)

PERINE, E. T. B. *The story of the trust companies*. (New York: Putnam. 1916. Pp. xvii, 327. \$1.50.)

An interesting narrative covering the history of trust companies in the United States from the early part of the last century to the present time, with many illustrations of old photographs and facsimiles of stock certificates, notes, and advertisements. The author's investigations also relate to state banking. There is a bibliography of four pages.

PHIPSON, C. B. *The true cause of the commercial difficulties of Great Britain*. (London: Allen & Unwin. 1917. Pp. 153. 2s. 6d.)

PIERSON, L. E. *The trade acceptance in national preparedness*. (New York: Irving National Bank. 1917. Pp. 22.)

STANOYEVICH, M. S. *Tolstoy's interpretation of money and property*. Reprinted from *Liberty*, Dec., 1916. (Oakland, Cal.: Liberty Pub. Co. 1916. Pp. 17. 25c.)

A scholarly essay with many footnotes.

STEELE, F. E. *How our overseas trade is financed*. (London: Butterworth & Co. 1916. Pp. 22. 1s.)

WILLCOX, J. M. *A history of the Philadelphia Saving Fund Society 1816-1916*. (Philadelphia: Lippincott. 1916. Pp. 239.)

This history of the first savings bank organized in the United States was compiled from the minutes, records, and account books of the bank in commemoration of the one hundredth anniversary. The efforts of Condry Raguette who played a large part in the establishment of the institution is abundantly illustrated by generous excerpts from correspondence. Appendices contain articles of associa-

tion and the charter. The volume is handsomely printed, with many portraits.

WOLFF, H. W. *Coöperative credit for the United States*. (New York: Sturgis & Walton. 1917. Pp. 349. \$1.50.)

YOUNG, W. L. and HEROLD, J. B. *Young's digest of the laws of the state of Louisiana relating to banks, savings banks, and trust companies*. Second edition. (Shreveport, La.: M. L. Bath Co. 1916. Pp. 234. \$7.50.)

Increase of prices of commodities since the beginning of the war. Second and third reports of Departmental Committee. (London: Wyman. 1917. 3d.)

Key to numerical system of the American Bankers Association; a numerical and alphabetical list of banks of the United States. Fourth edition. (Chicago: Rand, McNally. 1917. Pp. 571. \$1.50.)

Wholesale prices of leading articles in United States markets. January, 1914, to December, 1916. Miscellaneous series no. 52. (Washington: Dept. of Commerce. 1917. Pp. 14.)

Public Finance, Taxation, and Tariff

Financing the Public Schools. By EARLE CLARK. (Cleveland, Ohio: The Survey Committee of the Cleveland Foundation. 1915. Pp. 133. 25 cents.)

Public Education in Maryland. By ABRAHAM FLEXNER and FRANK P. BACHMAN. A Report to the Maryland Educational Survey Commission. (New York: The General Education Board. 1916. Pp. xviii, 176.)

The Public Schools of Springfield, Illinois. By the Division of Education of the Russell Sage Foundation under the direction of LEONARD P. AYRES. (Springfield, Ill.: Springfield Survey Committee. 1914. Pp. 151. 25 cents.)

These books embody the results of local educational surveys of the sort that is now becoming so common and so useful. To the economist their chief interest lies in the treatment they give to the topic of school finance—to which, indeed, the first volume is wholly devoted. All tell substantially the same story of increasing expenditure for public education, and of the need of still larger expenditures, at least in certain directions. Teachers are underpaid, material equipment even for present tasks is often inadequate or defective, and additional resources are needed for new lines of work.

The volume of the Cleveland Education Survey is naturally the most valuable of the three for the student of public finance. It

analyzes with great detail the finances of the Cleveland schools, and finds that, while the expenditures increased from \$2,360,000 in 1902-1903 to \$4,770,000 in 1913-1914, Cleveland was still "in many important respects below the standard set by cities of similar size"; and that the revenues of the board of education have failed to grow as rapidly as the outlay, so that "the Board has been forced to borrow money on short time notes in order to meet its current obligations." The lack of adequate revenue is largely due to the Ohio tax-limit law of 1911, although repeated changes in the laws relating to assessments have intensified the difficulty. The book supplies valuable information concerning some of the unfortunate effects of the tax law of 1911.

The Maryland report is valuable particularly for its criticism of the methods followed in the distribution of state school funds. The proceeds of the state school tax are distributed among the counties upon the basis of population between the ages of five and twenty years, which ignores differences of wealth as well as the higher cost of instruction in many rural districts. Other state funds are differently distributed; but in no case with satisfactory results, while in some instances flagrant abuses have long existed and funds have been misapplied or wholly wasted. Under existing conditions, therefore, educational facilities are not equalized, while conditions are made worse by the chaotic conditions of local assessments upon which the levy of the school tax is based. An equal assessment of property and a rational method of distribution are both necessary; and until they are secured, equalization of educational opportunities and burdens cannot be attained.

C. J. BULLOCK.

The Purposes of the Indebtedness of American Cities, 1880-1912.

By FRED EMERSON CLARK. Municipal Research No. 75.
(New York: Bureau of Municipal Research. 1916. Pp. v, 72. \$1.00.)

Mr. Clark prepared this study as his dissertation at the University of Illinois and the Bureau of Municipal Research has published it because it is "believed that it will be appreciated as a valuable contribution to works of reference on municipal government." The discussion deals with the purposes of issue of so-called funded or special assessment loans, limiting the comparison to per capita debt, although Mr. Clark states that "probably a comparison of the relation of debt to the incomes of the people or to their wealth

would be more satisfactory, but no suitable facts are available for such a purpose."

The cities are divided into five groups according to population, the largest group being those with over 500,000 and the smallest those with from 30,000 to 50,000. A geographical distinction has also been made: North Atlantic, South Atlantic, South Central, North Central, and Western. In the first part of the discussion, the question is considered historically for the three periods 1880-1890, 1890-1904, 1904-1912. The sources used are census reports on Wealth, Debt and Taxation and annual reports of the same bureau since 1904. The first period was one of decrease in per capita debt, as a result of the restrictions placed on municipal indebtedness, caution learned from the panic of 1873, and the uncertainty of the years immediately preceding and following the panic of 1884. Both the second and third periods are characterized by increase. From the geographical point of view, cities of the North Atlantic section have led in growth of population, number of cities, and increase in the burden of indebtedness.

There has been, too, a general increase in the importance of loans for productive purposes in comparison with those for non-productive purposes. Bonds for productive purposes are for those properties producing an income which can make them self-sustaining. This increase was especially rapid during the last period, 1904-1912, and was marked in all sections except the North Atlantic, in which it was already large in 1904.

The most significant chapter is that which deals with the changes in the purposes for which these loans have been incurred. Expenses for water works have caused the largest single debt for all cities in each year. Indeed the per capita burden for this purpose and the number of cities with such works were both greater in 1912 than in 1880. However, the water debt was less important in relation to the total indebtedness in 1912 than in 1880. The second group of productive properties is electric and gas plants. The greatest per capita burden and largest per cent of total debt for these purposes has been borne not by the largest but by the smallest cities. The burden has been increasing both in number of cities and in amounts but it is still small—less than one per cent of the total for 1912. The third group of such items is called "all other productive purposes" and includes cemeteries, improvements of waterways, bridges on which a toll is charged, markets and street railways. Of these the most important was that for im-

provement of waterways, but of course this was limited to comparatively few cities. The total amounts, however, were such as to make this group of expenses the cause of the largest relative increase in the total productive debt. "In both 1904 and 1912 the per capita debt of the North Atlantic cities was more than ten dollars greater than that of any other section and of more than eight per cent more importance in its relation to the total debt of the section." No attempt has been made to discover to what extent these activities are self-sustaining.

Debts for non-productive purposes include, in order of importance, those for schools, recreation, highways, sewers, bridges, building, protection (fire and police), war (a heritage of the Civil War which had disappeared in 1912), railroads and other aid, funding and refunding. Per capita educational expenses were, as we would expect, greater in 1912 than in 1880 and larger in the North Atlantic and Western sections than in the South.

The summary of the book points out: first, the noticeable increase in number of cities that report debts for the same purposes; second, the growth of total indebtedness in the North Atlantic and Western sections as compared with the static condition in the North Central section; and third, the fact that the per capita burden of indebtedness tends to increase with the growth of population.

Mr. Clark has done a careful, lucid piece of work. There are numerous valuable tables throughout the text and detailed statistics in the appendix. The bibliography is of necessity limited. A very wise suggestion is implied in several places—the need of more efficient accounting methods and of similarity in items included under the term "miscellaneous."

ROY G. BLAKEY.

University of Minnesota.

Economic Protectionism. By JOSEF GRUNZEL. Edited by EUGEN VON PHILIPPOVICH. Carnegie Endowment for International Peace. Division of Economics and History. JOHN BATES CLARK, Director. (Oxford: At the Clarendon Press; London, Edinburgh, New York, Toronto, Melbourne and Bombay: Humphrey Milford. 1916. Pp. xiii, 357. 8s. 6d.)

This book is a defense of protectionism as a national commercial policy.

Economic protectionism, as viewed by the author, is "neither

more nor less than the sum total of the measures adopted by the national-economy unit [the politically organized state] for the purpose of advancing its interests in the field of world economy." The measures here referred to, however, embrace, as will presently be shown, not only import duties but also numerous other devices ordinarily not considered in discussions on protectionism. Consequently, the volume before us is more comprehensive than the usual work on the same subject, and includes a consideration of a greater range of topics than one might naturally anticipate.

The book is divided into three parts dealing respectively with the genesis of protectionism, the direction which it assumes, and its effects. The first part consists largely of an analytical and historical presentation of the origin of protectionism as a commercial policy. Aside from certain interesting tables of European economic divisions and customs districts of the world, this part contains little new material. The second part comprises a formal discussion of protective measures as they affect commodities, capital, and labor. Both negative and positive measures are elaborated. The negative measures protecting commodities are customs duties; the manipulation of freight rates; governmental administrative measures adopted primarily for sanitary or hygienic purposes but which, nevertheless, afford a certain degree of protection to domestic industries; concerted popular action, such as boycotting foreign goods in the interest of the greater consumption of the home product. Among the positive measures which result in commodity protection are export bounties; special freight rates on exports; and measures for encouraging shipping. Similarly, protection to capital is accomplished, on the one hand, by regulations designed to discourage its leaving the country and, on the other, by making it attractive for foreign capital to be brought in for investment. Likewise, the labor market is protected by negative and positive legislation designed to manipulate both immigration and emigration. A discussion is undertaken of various theories whose common aim is to justify protectionism as a commercial policy. The author, with slight reservation, subscribes to the "defensive" or "national" theory, and all other theories proposed come in for more or less criticism.

Part three is a brief presentation of the effects of economic protectionism. The conclusion reached by Grunzel is:

The protective policy promotes the economic development of a country as it makes possible an industrialization which is not the result

of natural conditions but of the productive energy of its civilization. It increases the activity of a country in world-trade for the reason that an industrialized nation cannot rest content with domestic markets, but requires exportation in order to secure that minimizing of risk which is so valuable in every field of modern economic life. The more active participation in world-economic relations increases indeed the dependency of each country upon its neighbors, but at the same time it lessens the danger of this dependency by distributing both purchases and sales among many economic domains. It is true that conflicts of interest arise from the clashing of the protective policy measures of different countries, but, in view of a steady community of interest, these show themselves on the road to settlement by international agreement.

This volume is among the first to be published by the Division of Economics and History of the Carnegie Endowment for International Peace. These publications are under the general direction of a Committee of Research embracing economists, statesmen, and others, most of whom participated in a conference held in Switzerland in 1911. As would appear from an introductory note, neither this volume nor others which are to follow commits the Carnegie Endowment as a body or as individuals to the opinions expressed by the respective authors. Such opinions are neither approved nor condemned by the fact that they are printed by the Carnegie Endowment, but it is understood that the monographs are believed to be of such a character as to merit careful perusal.

AVARD L. BISHOP.

Yale University.

NEW BOOKS

BANCROFT, H. *Inheritance taxes for investors. Some practical notes on the inheritance tax laws of each of the states of the United States, with particular reference to their application to non-resident investors.* Second edition revised to January 1, 1917. (Boston: Houghton Mifflin. 1917. Pp. 133. \$1.)

DONALDSON, J. L. *State administration in Maryland.* Johns Hopkins University studies in historical and political science, series XXXIV, no. 4. (Baltimore: Johns Hopkins Press. 1917. Pp. 155. \$1.)
Contains a chapter on finance (pp. 80-105).

DURELL, A. J. V. *The principles and practice of the system of control of parliamentary grants.* (London: Gieves Pub. Co. 1917.)

FILLEBROWN, C. B. *The principles of natural taxation. Showing the origin and progress of plans for the payment of all public expenses from economic rent.* (Chicago: McClurg. 1917. Pp. xx, 281. \$1.50.)

GARDNER, P. W. *Summary of tax laws affecting individuals and corporations in Rhode Island.* (Providence: Union Trust Co. 1917. Pp. 44.)

- HAVY, A. *Rapport sur les réformes à apporter au régime économique de la France.* (Paris: 1 place de Valois. 1917. Pp. 136.)
- HIGGS, H. *National economy. An outline of public administration.* (London: Macmillan. 1917. 3s. 6d.)
- JAMES, H. G. *Municipal functions.* National Municipal League series. (New York: Appleton. 1917. Pp. xi, 369. \$2.)
- JAY, P. *Impôts nouveaux. Impôts modifiés ou supprimés.* (Paris: 69 rue d'Aboukir. 1917. 4 fr.)
- JÈZE, G. *Les finances de guerre de l'Angleterre, 2^e supplément. La politique des économies.* (Paris: Giard & Brière. 1917.)
- KAHN, O. H. *Some comments on war taxation.* (New York: 52 William St. 1917. Pp. 33.)
- KLIPSTEIN, E. C. *Coal tar dyes in the tariffs of the United States.* (East Orange, N. J.: E. C. Klipstein. 1916. Pp. 56.)
- LEAUTEY, L. A. and LESEURRE, A. *La taxation des bénéfices de guerre et l'unification des bilans.* (Paris: Librairie Comptable et Administrative. 1917.)
- LECOUTURIER, H. *Impôt général sur le revenu.* New edition, revised. (Paris: Hugonis. 1917. Pp. 300. 12 fr.)
- MERCIER, A. *L'impôt sur le revenu, manuel du contribuable.* New edition. (Paris: Roustan. 1917. 4 fr.)
- MERCIER, A. *Les impôts en 1917, commentaire.* (Paris: Roustan. 1917. 1.50 fr.)
- MORAWETZ, V. *Proposed war taxation and the bond issue.* Reprint of a letter on war taxation published in the *New York Times*, April 19, 1917. (New York. 1917. Pp. 10.)
- NORTH, F. A. *The income tax under United States and Massachusetts law.* (Boston: Johnson & North. 1917. Pp. 139.)
- PERRY, J. E. *Practical working of the Massachusetts income tax.* (Boston: Merchants National Bank. 1917.)
- PRENDERGAST, W. A. *The extension of municipal activities and its effect on municipal expenditures, including a review of the budgets of New York City since consolidation, 1898-1917.* (New York: M. B. Brown Printing & Binding Co. 1917. Pp. 65.)
- RAVIART, E. *L'impôt général sur le revenu, guide du contribuable.* (Paris: Rousseau. 1917. 2 fr.)
- SEITZ, H. K. *Schweiz. Anleihepolitik in Bund, Kantonen und Gemeinden.* (Zurich: Institut Orell Füssli. 1915. Pp. 285.)

This volume supplements very usefully Steiger's well-known work upon the finances of Swiss cantons and communes, which gave little attention to the subject of public debts. The ante-bellum situation was a comparatively favorable one. Debts had increased, and very

largely, during the last sixty years; but, of the total outstanding in 1910 (2,700,000,000 francs), about 80 per cent had been incurred for productive purposes, while those representing unproductive outlays (552,000,000) imposed a per capita burden of 147 francs. In general it can be said that borrowing has been largely confined to productive purposes, and that unproductive outlays have been met principally out of ordinary revenues.

Dr. Seitz considers in great detail the laws governing the subject, the forms of loans and method of issue, the conversion and amortization of debts, and the markets (local and foreign) for Swiss securities. He has collected a large amount of historical materials of great interest and value, of which those relating to the growth of debts, rates of interest, and the market for Swiss securities, may be singled out for special mention. France is the chief foreign creditor, and in late years few Swiss securities have been held in Germany. Swiss capitalists have been taking a large part, or even the whole, of the more recent loans; so that Swiss finance has not required the aid of the foreign investor. Since 1913 the home market has demonstrated its capacity by absorbing the whole of several large issues.

C. J. BULLOCK.

SELIGMAN, E. R. A. *The House revenue bill. A constructive criticism.* Columbia war papers, series I, no. 16. (New York: Division of Intelligence and Publicity of Columbia University. 1917. Pp. 22.)

SMITH, W. McC. *The Massachusetts income tax, its requirements and workings.* (Boston: The author. 1917. Pp. 23.)

SNELLING, W. E. *Excess profits (including excess mineral rights) duty and levies under the munitions of war acts; incorporating the provisions of the income tax acts made applicable by statute and by regulation; also the regulations of the Commissioners of Inland Revenue and of the Minister of Munitions.* Second edition, revised and enlarged. (New York: Pitman. 1916. Pp. 152. \$3.)

VIDAL, E., DE NOUVION, G., and others. *Les finances au service du pays; études sur les questions et problèmes financiers actuels.* (Paris: Tenin. 1917. 7.50 fr.)

WHITE, J. D. *Land-value taxation and feu-duties.* (Glasgow: J. Maclehose & Sons. 1916. Pp. 23. 3d.)

WILLOUGHBY, W. F., and others. *The system of financial administration of Great Britain.* (New York: Published by D. Appleton & Co. for the Institute for Government Research. 1917. Pp. xv, 361. \$2.75.)

YOUNG, L. E. *Mine taxation in the United States.* (Urbana: Univ. Illinois. 1917. Pp. 275. \$1.50.)

Bender's federal revenue law, 1916; the revenue act of September 8, 1916, with notes and commentaries; also, federal taxation in general. (Albany, N. Y.: Matthew Bender & Co. 1917. Pp. xi, 427. \$4.)

- The excess profits tax law; act approved March 3, 1917.* (New York: Guaranty Trust Co. 1917. Pp. 18.)
- The federal estate tax law and regulations (United States inheritance tax). Act of September 8, 1916; amended March 3, 1917.* (New York: Guaranty Trust Co. 1917. Pp. 53.)
- Income tax. How to claim repayment of income tax for 1916-17.* (London: Mathieson. 1916. Pp. 94. 1s.)
- The investment tax law and the mortgage tax law of the state of New York, as amended in 1917.* (New York: Guaranty Trust Co. 1917. Pp. 61.)
- Interborough finance, present and future, with especial reference to conditions when the new lines shall have been completed; including synopsis of the financial structure of Interborough Consolidated Corporation.* (New York: Van Emburgh & Atterbury. 1917. Pp. 69.)
- Mobilizing money for war.* (New York: Guaranty Trust Co. 1917. Pp. 12.)
- Proceedings of the sixth state conference on taxation, held Feb. 1-2, 1917.* (Lansing: Michigan State Tax Association. 1917. Pp. 118.)
- Prospectuses of the three war loans of the United Kingdom.* (New York: National Bank of Commerce. 1917.)
- War finance primer.* (New York: National Bank of Commerce. 1917. Pp. 136.)

Population and Migration

NEW BOOKS

- ABBOTT, G. *The immigrant and the community.* (New York: Century Co. 1917. Pp. 303. \$1.50.)
- HERSCH, L. *La mortalité chez les neutres en temps de guerre.* (Paris: Giard & Brière. 1915. Pp. 36.)
- ROBINSON, W. J. *Eugenics, marriage and birth control.* (New York: Critic and Guide Co. 1917. Pp. 208. \$1.)
- STEINER, J. F. *The Japanese invasion; a study in the psychology of inter-racial contacts.* (New York: McClurg. 1917. \$1.25.)
- WARD, J. M. *The immigration problem; or, America first; a brief treatise explaining how hundreds of thousands of foreign cheap laborers are annually brought to the United States under the guise of immigrants, and urging the need of more stringent laws to check this growing evil and protect American labor.* (Poplar Bluff, Mo.; Republican Prtg. Co. 1917. Pp. 110.)
- Births, deaths, and marriages, England and Wales. Report of Registrar-General for 1915.* (London: King. 1917. 5s.)
- The blind in the United States, 1910.* (Washington: Bureau of the Census. 1917. Pp. 342.)

Mortality statistics, 1915. (Washington: Bureau of Census. 1917. Pp. 707.)

Ten years of work, 1907-1916. Report of work in reducing the infant death rate of New York City. (New York: New York Milk Committee. 1916. Pp. 38.)

Social Problems and Reforms

The Minimum Cost of Living. A Study of Families of Limited Income in New York City. By WINIFRED STUART GIBBS. (New York: The Macmillan Company. 1917. Pp. xv, 93. \$1.00.)

The subtitle of this useful book is: A Study of Families of Limited Income in New York City. It is an accurate laboratory contribution to family budget literature, of use to every student of social conditions. Further, it demonstrates the practicability of using the family budget as a lever to raise the living standards both of dependent and of independent families, and will, therefore, be of service to every social worker. Both the work done and this effective publication of the results are achievements of the New York Association for Improving the Condition of the Poor, in full accord with its generally constructive policy in dealing with dependence.

Miss Gibbs for ten years has been in charge of this association's active Division of Home Economics. In this volume she presents, with grateful clarity and brevity of statement, a story of family budget making, carried on with detailed care, during the past two years, by seventy-five selected families on the dependent list of the association. All of these were families of widows, with children, to which the association was providing steady incomes.

These families were taught to keep classified expense accounts (the association developed, three years ago, a simple, practical family budget book for use by such families) that teachers of cooking and sewing might the better instruct them to make wise use of their limited incomes.

Miss Gibbs divides her story of these seventy-five family budgets into three parts. In part I, after telling of the method employed in making the study, she devotes a chapter to The Estimate of Minimum Requirement. Tabulated details of estimates to cover shelter, food, fuel and light, clothing and sundries, show the reader beyond any doubt that, as stated by the author, the estimates are on a "minimum basis—the lowest sum on which families could maintain health and working power" (p. xiv).

Part II tabulates the seventy-five expense accounts in detail, family by family, covering for each of the budget headings, estimate of needs, actual expenses, actual incomes and year's deficits or surpluses (pp. 31 to 45).

Part III states the results. It opens with a chapter which tells the condition of the families both before and after receiving steady income and instruction in its best use. Chapters follow, describing in some detail and with selected illustrative tables, the results with reference to housing, food, clothing, firing, lighting, and incidentals. This clear story of results convinces the reader not only that the trained staff of this association has made its budget method work among these dependent families, but also that Miss Gibbs is justified in her conclusion that this method might be applied with social gain to independent families. Miss Gibbs thus states this conclusion: "The intensive work described in these pages has shown that it would be well worth while for neighborhoods and communities to undertake systematic coöperation for the purpose of building for future strength. Every family that learns to attain its potential best, physical, mental and spiritual, is a strong power . . . Conservation of all resources among independent families reduces to a minimum the number on the verge of the so-called poverty line" (pp. 92-93).

WALTER E. CLARK.

The College of the City of New York.

Vocational Education Survey of Minncapolis, Minnesota. Made by the NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION. Bulletin of the United States Bureau of Labor Statistics, Whole No. 199, December, 1916. Vocational Education Series, No. 1. (Washington: Superintendent of Documents. 1917. Pp. 592. 65 cents.)

Two special features distinguish the survey made by the National Society for the Promotion of Industrial Education in Minneapolis during 1915 and now available in a revised edition published by the United States Bureau of Labor Statistics.

In the first place, the admirable policy has been established by this society of holding its annual convention in a city which agrees to conduct for its own benefit a vocational education survey in coöperation with the society. Mr. A. Lincoln Filene, of Boston, is the author of this fruitful idea. One result has been to focus the

interest of employers and educational administrators at the annual sessions mainly on the findings and problems formulated by the investigations which have been under way.

The second outstanding feature of the report is its group of trade agreements, successfully effected by Dr. Prosser, whereby the proposed vocational courses are to be undertaken in coöperation with representative trade committees of employers and employees.

The Minneapolis survey marks an important step forward in properly supervised, and, one may say, socialized vocational education. A portion of this survey is given over to discussion already familiar to students of educational and economic readjustment, reinforced, however, by the clearest and best analyzed occupational studies thus far presented in any American study of the relation between school and work.

To describe it as a summary of the result of a year of elaborate investigation into the principal industries of a large city, presented in more than five hundred closely printed pages, would hardly do justice to the present volume. In it may be found minute information about the method of the survey, the extent to which the schools of Minneapolis are meeting the needs of the children headed for employment, how far private agencies and apprenticeship plans meet the needs for industrial preparation, a wealth of charted and well-analyzed statements of specific requirements in such occupations as building trades, the metal trades, woodwork, printing, flour milling, baking, laundry work, garment making, millinery, dressmaking, office work, knitting mill operating, agriculture, and store salesmanship.

One practical outcome of this study is the well-endowed and successful Dunwoody Institute for trade training in Minneapolis. Another, and perhaps more far-reaching, is the influence which this report has had on vocational education policies throughout the country. With the Smith-Hughes bill, now law, providing for federal aid to vocational training in the states, the present survey, and indeed all the other surveys and publications of the National Society will supply the necessary guidance, and above all the viewpoint which will forward the work of educational and industrial reconstruction through vocational training.

MEYER BLOOMFIELD.

NEW BOOKS

- BEMAN, L. T. *Selected articles on prohibition of the liquor traffic*. Second edition, revised. Debaters' handbook series. (White Plains, N. Y.: Wilson. 1917. Pp. 237. \$1.25.)
- BENNETT, H. M. *Women and work; the economic value of college training*. (New York: Appleton. 1917. Pp. 286. \$1.50.)
- BLUE, F. O. *When a state goes dry; a brief study in law enforcement*. (Westerville, O.: American Issue Pub. Co. 1916. Pp. 114. 75c.)
- BREWER, J. M. and KELLY, R. W. *A selected critical bibliography of vocational guidance*. Harvard bulletins in education, no. IV. (Cambridge: Harvard University. 1917. Pp. 73. 50c.)
- DAVIES, G. R. *Social environment*. (Chicago: McClurg. 1917. Pp. 149. 50c.)
- D'AETH, F. G. *The juvenile adult problem*. (London: Humphrey Milford. 1917. Pp. 10. 4d.)
- EUBANK, E. E. *A study of family desertion*. (Chicago: Dept. of Public Welfare. 1916. Pp. 73.)
- FERRI, E. *Criminal sociology*. Translated by J. I. KELLY and J. LISLE. Edited by W. W. SMITHERS. Modern criminal series. (Boston: Little, Brown. 1917. Pp. 577. \$5.)
- HARRIS, L. I. *The municipality in industrial hygiene; new methods for the protection of public health in New York City. First annual report of the Division of Industrial Hygiene, Department of Health, New York City*. (New York: Scientific American. 1917.)
- JACOBS, C. L. *A vocational guidance bibliography compiled for the commissioner of industrial and vocational education*. (Sacramento: California State Board of Education. 1916. Pp. 24.)
- MACCARTHY, J. H. *Where garments and Americans are made; story of Sicher system of factory education for Americanization of foreigners, conducted in coöperation with New York Board of Education—a challenge to hyphenatism*. (New York: Writers' Pub. Co. 1917. Pp. 57.)
- MORRIS, M. *The nation's health*. (New York: Funk & Wagnalls. 1917. Pp. 152. \$1.25.)
- PICKARD, A. E. and HENEGREN, M. C. *Industrial work for girls*. (St. Paul, Minn.: Webb Pub. Co. Pp. 140.)
- RAHILLY, A. *A guide to books for social students and workers*. University and labor series, no. 1. (London: King. 1917. 3d.)
- RICHMOND, M. E. *Social diagnosis*. (New York: Russell Sage Foundation. 1917. Pp. 511. \$2.)
- ROBINSON, E. *Vocational education and guidance of youth; an outline for study*. (White Plains, N. Y.: Wilson. Pp. 66. 35c.)

- TREADWAY, W. L. *The feeble-minded. Their prevalence and needs in the school population of Arkansas.* United States Public Health Service reprint no. 379 from the Public Health Reports. (Washington: Superintendent of Documents. 1917. Pp. 19.)
- DE VESSELITSKY, V. *Expenditure and waste.* (London: Bell. 1917. 8d.)
- WALTON, C. *Welfare study.* (London: Maclure, Macdonald. 1917. Pp. 24. 6d.)
- WARD, H. F. *The labor movement from the standpoint of religious values. The verbatim stenographic report of a series of lectures delivered at Ford Hall, Boston, together with the questions and answers of the forum period following each lecture.* (New York: Sturgis & Walton. 1917. Pp. 199. \$1.25.)
- WILLIAMS, W. S. *The problem of the unemployed.* (Boston: Gorham Press. 1917. Pp. 106. \$1.)
- Cleveland conference of illegitimacy and its committees.* (Cleveland, O.: The Cleveland Federation for Charity and Philanthropy. 1916. Pp. 19.)
- Preliminary report to the mayor and alderman.* (Chicago: Chicago Commission on the Liquor Problem. 1916. Pp. 65.)
- The prevalence of venereal diseases in Canada. A presentation of facts and figures.* Conservation Commission of Canada. (Toronto: University of Toronto Press. 1917. Pp. 21.)
- First year's work of the Institute for Public Service. November, 1915, through December, 1916.* (New York: 51 Chambers St. 1917. Pp. 63. 50c.)
- How two thousand Detroit mothers were cared for in childbirth.* (Detroit: Committee on Maternity Survey of the Detroit Home Nursing Association. 1916. Pp. 22.)
- Second biennial report of the Industrial Welfare Commission of the State of Oregon, 1915-1916.* (Salem: State Prtg. Dept. 1917. Pp. 57.)
- The second social year book. The human problems and resources of Cleveland, sixth city.* (Cleveland, O.: Cleveland Federation of Charity and Philanthropy. 1916. Pp. 125. 35c.)
- Social service guide to workers.* (Birmingham, Eng.: Birmingham and Midland Brotherhood Federation. 1917. Pp. 79. 2d.)
- The sociology of rural life. Papers and proceedings of the eleventh annual meeting of the American Sociological Society, held at Columbus, Ohio, December 27-29, 1916.* (Chicago: Univ. Chicago Press. 1917. Pp. 233. \$1.50.)

Insurance and Pensions

The Principles of Insurance. Volume I. *Life.* By W. F. GEPHART.
(New York: The Macmillan Company. 1917. Pp. xi, 385.
\$1.50.)

It has not been generally appreciated that the life insurance business is one of the most important kinds of business in the country, being comparable in its magnitude to the banking or the railroad business. It is also probably the least understood of any of the more important kinds of business. Consequently, a book which gives an adequate survey of this business, giving both the practical standpoint and explaining the scientific foundations upon which it rests, is of much value. The present book does this and in a satisfactory way. It is written by one who knows insurance rather from the scholar's standpoint than that of the practical insurance man, and yet, in general, the practical side of the business is well treated.

There are two principal reasons why, notwithstanding the importance of life insurance, there is less general knowledge about it than about other kinds of business of at all comparable magnitude. One of these is the practical one of the way in which the average man comes in contact with the business, in that he obtains from the company a promise to pay a definite sum at his death (or, if an endowment, at some earlier date) and pays to the company a periodic premium for this. Such a relation is very different from, for instance, his relation with his bank, where he is constantly drawing checks, making deposits, having to keep watch of his balance, perhaps seeking accommodation in loans or discounts, or other favors. The other principal reason is that there are scientific principles underlying insurance which are understood by comparatively few of the general public; and without some conception of these principles it is not possible to really understand the business. A third reason might perhaps be added; namely, that the business is unlike any other kinds of business in that instead of selling a commodity the insurance company sells a promise to pay at some future time, the time itself depending upon the contingency of death, so that the obligations of the company are not present but rather the future obligations of having the proper funds in hand when the promises to pay mature.

It is important that a more general knowledge of the fundamentals of life insurance should be disseminated, since the lack of real

information frequently means misinformation; even if for no other reason this would be important in the question of legislation, for there are no kinds of business except banking and transportation which are so regulated and supervised by the state as insurance. This regulation can either serve the public or do great harm to the public according as it is wise or unwise; and much of the unwise regulation that has thus far been enacted has resulted from lack of knowledge.

Mr. Gephart has well met the problem. His book is simple and readable and yet broad, and adequate to give not only an understanding of the fundamental principles but a great deal of the practical business side. Its wide scope is shown by an enumeration of some of the subjects it takes up: the history of life insurance, mortality tables, the scientific foundations of the business, the kinds of life insurance contracts, the selection of risks and some of the special classes as regards mortality, what the reserve is and how it is entirely different from a bank reserve, surplus and dividends and the problems connected therewith, investments of life companies, insurance for wage-earners, the relation of the state to insurance.

The book avoids a difficulty which sometimes occurs when those outside of the business attempt to write about it: namely, the difficulty of supporting theories which, for practical reasons, are unworkable. In life insurance one of the most common of these is the theory of saving to the company the expense caused by agents' commissions, which has been tried many times and without success. The nearest approach to success has been achieved by the Equitable Insurance Company of London, one of the oldest companies in existence and one which has had an exceedingly honorable history. Yet it issues less insurance in a year than one of the large American companies issues in a week, and in its premium rates and returns to policyholders is about on a par with other British companies which do employ agents.

A very valuable feature of the book is that it brings out forcefully the true nature of life insurance; that it is not an investment or a proposition into which the insured goes for profit, but that it is a coöperative scheme in which a large part of the work of the company is to distribute among many the cost which is in any case entailed on the public by the mortality.

The arrangement is a little unfortunate. The book begins with a history of life insurance, then takes the theory of life insurance,

the mortality tables, selection of lives, etc. Inasmuch as the average person knows very little about what the business of life insurance is and what it does for the policyholder, the reader should first be told what the business he is reading about has for sale, rather than what are its scientific foundations and what has been the history of its products. Afterwards these latter subjects will be of greater interest and will have more meaning.

There are some errors in the book that should not have been made. On page 146 it is stated that the renewal commissions are now commonly limited to the first seven years of the policy; whereas they usually either run for a longer term than this or are commuted into three years. On page 249 it is said that "*many* states have considered it necessary to lay down the limit of expense for new business"; whereas there are two only, New York and Wisconsin. Such errors are mostly in detail and do not greatly affect the value of the work. There is, however, one serious omission. While most of the well-known mortality tables are fully treated, a table which is more important than almost any other, and which was constructed from the most extensive investigation ever made for any general mortality table founded on insured lives, the British Offices table, is entirely passed over. Furthermore, on page 63 it is stated that the Combined Experience table is the one now generally in use in England, whereas it is the British Offices tables which are in general use.

WENDELL M. STRONG.

The Principles of Insurance. Volume II. Fire. By W. F. GEPHART. (New York: The Macmillan Company. 1917. Pp. xi, 332. \$1.50.)

Fire underwriters have often complained that a business with which only a few others are comparable in point of size, universality, and importance, should have received from the public so little intelligent study. Their thirty million policies represent an average of about one and one-half for each family in this country, and aggregate a total of more than sixty billion dollars of fire insurance in force; and yet there are probably ten men who can intelligently discuss banking or railroading to every one who is really conversant with the problems of underwriting. For this reason, the volume under consideration is of unusual importance.

Professor Gephart's work takes the form of a student's textbook. It is written from the viewpoint of an economist rather than

of a technician, and properly so, since it is intended for the general student. It bears evidence of painstaking accumulation of data, and deliberate, intelligent appraisal of values. It would be too much to claim that the author has entirely mastered a subject of which the depths have by no means been sounded by those who spend their lives in the work or that all of his statements would pass without challenge from underwriters, but it is certain that he has written a clear, interesting, and admirably balanced study of the principles of fire insurance.

It is in its clarity and sense of proportion that this volume is particularly noteworthy. A subject so extensive and containing such elements of complication has naturally led to specialization among underwriters, and those among them who have published books, have generally dealt with some one of the phases—such as the actuarial, administrative, financial, legal, or engineering problems. Most of them lack the perspective of an outsider; and when this outsider is equipped with a trained mind and a sincere purpose, both evident in this book, his labors are of value.

The volume in question opens with a brief survey of the history of fire insurance, necessarily much fore-shortened, but sufficient for an introduction. From this point, the author proceeds to a statement of economic principles, such as those involved in the relation of fire insurance to production, to credit, to distribution, and to its general background of American fire losses. He negates the occasional charge that fire insurance is a monopoly, and says: "As the business is at present conducted, its very character induces excessive competition and this natural tendency is aided by mistaken legislation which has for its purpose the placing of a premium on competition by the companies."

After chapters upon business organization and methods, Professor Gephart enters into a consideration of the highly technical questions of hazard and rate making, which are viewed by many students as constituting the most complicated problem known to business finance. This ground is much controverted, as the author fully recognizes, but his definitions and statements of principles are substantially correct, and he notes the earnest efforts of the underwriters to work out rates which shall correspond as closely as possible to the exact degrees of hazard involved in all risks. In this connection he makes particular references to the establishment of the Actuarial Bureau of the National Board of Fire Underwriters for the purpose of compiling and analyzing

national fire loss statistics. He is obviously a disbeliever in the value of state rate making as compared with public supervision.

Other chapters deal with the policy contract, limitation of liability, and the finances of fire insurance, and the author presents a brief summary of the fire prevention efforts being made through the National Board and other instrumentalities.

The last chapter is devoted to the well-fought field of the relation of the state to insurance. In this chapter it is interesting to note that Professor Gephart reaches independent conclusions similar, on the whole, to those long held by the leading underwriters. He says that "the popular notions and sophisms of insurance are to be found in the case of scarcely any other business"; and he notes as "popular fallacies" the ideas that "the public can benefit in price by encouraging and compelling independent action on the part of all companies in selling their commodity," "that insurance is a business suited for profit taking," "that insurance is a peculiarly profitable business for those engaged in it," and that insurance companies can be expected to pay "from some mysterious source sums far in excess of the premiums paid them and their earnings."

His general conclusions are expressed in his closing words: "Whatever reforms are needed can be best accomplished by the fire insurance companies themselves. A greater degree of coöperation with the ends in view of restricting undesirable competition and of devising standards for the business, is the great need of the fire insurance business."

In point of copy-reading, the volume leaves something to be desired. For example, The National Board of Fire Underwriters is occasionally referred to as "The National Board of Underwriters" and once as "The National Board of Fire Indemnities."

WILBUR E. MALLALIEU.

NEW BOOKS

COMBAT, F.-J. *Les assurances et la guerre (1914-1915)*. (Paris: Berger-Levrault. 1917.)

CORNELIUS, M. P. *Accidental means; a brief on the insuring clause of personal policies*. Revised and brought down to December, 1916. (New York: Hine Bros. 1917. Pp. 118. \$3.)

DEITCH, C. A. *Digest of insurance cases. Volume 29, for the year ending October 31, 1916*. (Indianapolis: Rough Notes Co. 1916. Pp. xlv, 596.)

- DUDLEY, W. A. *Finance and life insurance*. (Mexico, Mo.: Missouri Prtg. & Pub. Co. 1916. Pp. 227. \$5.)
- GENET, G. *De l'importance économique de l'organisation et du fonctionnement en France des compagnies anonymes françaises d'assurances à primes fixes contre l'incendie, étude économique, historique et juridique*. (Paris: Fontemoing. 1917. 7.50 fr.)
- HARDY, E. R. *Insurance*. (New York: Alexander Hamilton Inst. 1917.)
- HONNOLD, A. B. *A treatise on the American and English workmen's compensation laws as interpreted by the courts and tribunals vested with the power of administering and enforcing same*. (Kansas City, Mo.: Vernon Law Bk. Co. 1917.)
- HORNER, W. M. *Training for a life insurance agent*. (Philadelphia: Lippincott. 1917. \$1.25.)
- HUEBNER, S. S., editor. *Modern insurance problems*. (Philadelphia: Am. Acad. Pol. Soc. Sci. 1917.)
- JACKSON, J. A. *Easy lessons in life insurance for life insurance agents, laymen and company officials*. (Newark, N. J.: Baker Prtg. Co. 1917. Pp. 146. \$1.50.)
- JOYCE, J. A. *Joyce on insurance*. (Rochester, N. Y.: Lawyers Coöperative Pub. Co. 1917. 5 vols. \$37.50.)
- KISER, D. J. *Workmen's compensation acts; a corpus juris treatise*. (New York: Am. Law Bk. Co. 1917. Pp. 146.)
- LARTER, A. E. *The L. & L. rating system, designed to effect standardization of fire insurance rating, based upon an analysis of conditions contributing to the fire loss*. (New York: Evening Post. 1917. Pp. 80.)
- PEARSON, B. *Policy forms. Series B*. (Louisville, Ky.: Insurance Field Co. 1917. Pp. 35. \$1.)
- ROE, E. T. *Workmen's compensation laws for personal injury sustained while working*. (Chicago: P. F. Pettibone & Co. 1917. Pp. 45.)
- SHERMAN, P. T. *Criticism of a tentative draft of an act for health insurance "submitted for criticism and discussion by the committee on social insurance of the American Association for Labor Legislation"*. (New York: Roy Press. 1917. Pp. 93. \$1.)
- Analysis of causes of invalidity in respect to claims under the invalid and old-age pensions act*. (Melbourne, Australia: A. J. Mullett. 1916. Pp. 20.)
- Benefit and pension plans for the employes of International Harvester Companies. Revised issue of June 1, 1916*. (Chicago. 1917. Pp. 50.)
- Non-contributing old age pensions and health insurance. Report of the*

special committee on social insurance. (Boston: Boston Chamber of Commerce. 1917. Pp. 14.)

The pension problem and the philosophy of contributions. Bureau of Municipal Research, New York City. (New York: Pension Pub. Co. 1917. Pp. 20.)

The standard fire insurance policy and loss adjustment lectures. (New York: Ins. Soc. of N. Y.)

Summary of report on workmen's compensation acts in the United States. The legal phase. (Boston: National Industrial Conference Board. 1917. Pp. 8.)

Pauperism and Charities

NEW BOOKS

BERCOVICI, K. *Crimes of charity.* (New York: A. A. Knopf. 1917. Pp. 271. \$1.50.)

GUILD, F. H. *State supervision and administration of charities.* Indiana University studies. (Bloomington, Ind.: Indiana Univ. 1917.)

Socialism and Co-operative Enterprises

Profit Sharing in the United States. By BORIS EMMET. Bulletin of the United States Bureau of Labor Statistics, Whole No. 208, December, 1916; Miscellaneous Series, No. 13. (Washington: Superintendent of Documents. 1917. Pp. 188. 20 cents.)

There has been abundant evidence in recent years of a revival of interest of employers in schemes of profit sharing, and there have been several attempts to bring together in one statement a description of the more notable existing schemes. There have also been numerous articles descriptive of particular schemes. The difficulty with this literature has been its partial and occasional character, its lack of perspective. Mr. Emmet's report covers somewhat the same ground as the report of the Civic Federation, but is more broadly managed. It claims to have "carefully examined and analyzed . . . all of the profit sharing plans known to be in operation in the United States at the present time" and, in addition, to have studied sundry other plans not accurately described as profit sharing. Besides thus throwing light upon the extent of profit sharing in the United States, it examines the character of the schemes with reference to the factors which determine what profits are to be distributed and to the conditions under which payments are made to employees. It studies the proportion of the working force who participate; the occupations

and types of employment of the participating workmen; the kind of benefits which accrue by virtue of participation; the cost of the plans to the employers, and, finally, the results secured. Apart from this comprehensive treatment there is a detailed examination of several bonus plans which pass for profit sharing.

All of this constitutes a body of fact and exposition of much value. But here the utility of the study may be said to end. There is, indeed, a final section entitled "Extent to which objects sought by establishment of profit sharing plans have been realized," but the section runs to only three pages and is meager. Although it is hardly to be expected that a government study should attempt to enter into the philosophy of its subject, there is a good deal more that this bureau report might have accomplished. Its study of the results of profit sharing is based entirely upon reports from employers. It does not appear that the state of mind of employees has been directly taken into account. Less than three pages is given to a discussion of discontinued plans, yet these pages indicate that in one way or another collapse was due to discontent of the employees. Beyond question, one difficulty which in the past has limited the development of profit sharing has been the narrow tendency of employers to regard the workmen's interests as wholly incidental to their own. The present report does not improve upon this point of view. We must be grateful for so careful a compilation and analysis of the plans in existence in the United States, but we have still to hope for a study which will show us profit sharing from the inside, as it appears to the workers as well as to the managers of industry.

ROBERT F. FOERSTER.

Harvard University.

NEW BOOKS

BARNHILL, J. B. *One hundred best anti-socialist books.* (Washington: Anti-Socialist Bk. Co. 1917. Pp. 8. Gratis.)

CROSTHWAITE, H. R. *Coöperation: comparative studies and the central provinces system.* (Calcutta: Thacker, Spink & Co., for the Central Provinces Federation of Coöperative Banks. 1916. Pp. 542. 6 Rs.)

GHEENT, W. J. *Appeal socialist classics.* (Girard, Kan.: Appeal to Reason. 1916. 25c.)

KAMMAN, W. F. *Socialism in German American literature.* (Philadelphia: Americana Germanica Press. 1917. Pp. 124.)

MUKHERJI, P. *The coöperative movement in India*. (Calcutta: Thacker, Spink & Co. 1916. Pp. xx, 453.)

PERKY, C. W. *Coöperation in the United States*. (New York: The Intercollegiate Socialist. 1917. Pp. 31.)

THOMPSON, C. D. *Municipal ownership*. (New York: Huebsch. 1917. Pp. 114. \$1.)

Statistics and Its Methods

NEW BOOKS

TAYLOR, J. M. *Ourselves. A personal and family history register for preserving records of a private and personal nature, of one married couple and their children, including an appendix on the development of children in mind, body, character, and personality*. (Philadelphia: F. A. Davis Co. 1917. \$5.)

The official year book of New South Wales, 1915. (Sydney: Bureau of Statistics. 1916. Pp. 990.)

Notes statistiques sur les céréales. (Rome: Inst. Intern. d'Agr. 1917.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

SOME PUBLIC AND ECONOMIC ASPECTS OF THE LUMBER INDUSTRY.

For four long years nearly 5,000,000 people of the United States have been painfully aware that something is radically wrong with the lumber industry. Countless writers and platform speakers have offered diagnoses, but the first careful, comprehensive analysis is to be found in a public document, popularly known as Report No. 114 and entitled *Some Public and Economic Aspects of the Lumber Industry*, Studies of the Lumber Industry, part I, by William B. Greeley, assistant forester (Washington, Superintendent of Documents, January 24, 1917, 25 cents). The document is one of a series and was prepared through the collaboration of the Forestry Service, the Bureau of Foreign and Domestic Commerce, and the Federal Trade Commission, although for certain statements of fact and methods of presentation the latter body assumes neither credit nor responsibility.

While Mr. Greeley's survey includes the whole industry, certain salient features stand out clearly, among which may be mentioned: A public land policy under which great areas of standing timber were virtually given away on the same basis as common farming lands, thus paving the way for an eventual overstocking of the timber market; the buying of timber too freely by short-time investors; the overcapitalization of the lumber resources; the proneness of lumber manufacturers to spend their time and energy in timber speculations rather than in bringing the mill end of the business to a high point of efficiency; the growing competition of substitutes for lumber; and, lastly, the unstable nature of the lumber business.

The remedies proposed follow along three general lines: A separation of the investment and manufacturing phases of the industry; the adoption of more efficient methods of milling and marketing; and the extension of the National Forests to include many holdings which are now dead losses to their owners.

The study is very valuable because of the mass of data brought into compact form, because of the clarity and succinctness with which lumber activities are described, and because of the frankness used in depicting the illusions and pitfalls of the business. Every person contemplating purchasing timber lands, or building lumber mills, or investing in timber bonds, should first read this report.

The document, however, rests under a curse common to government reports. It was born too late to be of greatest service. The data

relate primarily to conditions up to 1914, and, if the report had been published three years ago, would have been of inestimable value. Today the situation, both from the material and psychological viewpoints, has changed. Hundreds and hundreds of mills have been swept out of existence, and thousands of investors ruined, yet, curiously enough, due to a set of unexpected circumstances, lumber prices are as high as they ever have been. This is explained by the general depletion of stocks in local yards and the inability of mills to supply this shortage due to lack of railroad cars, and to much sentimental talk of the vast amount of timber to be used in building emergency vessels during the present war. The victim, who by all the rules of the game, should have been dead and buried, is showing most astonishing signs of life. Perhaps these activities are but the proverbial rally which is to hasten his untimely demise, but timber dealers, shrewd in understanding human nature, are so busy preparing for heavy investments of Eastern capital that they have no time left to read of the ills of the industry. Thus, while Mr. Greeley's analysis will undoubtedly hold true over a period of years, its immediate importance is lost by a sudden reversal of conditions.

EDWIN CLYDE ROBBINS.

University of Oregon.

The Bureau of Foreign and Domestic Commerce of the federal Department of Commerce has recently issued the following publications: In the Special Agents Series:

No. 130, *Wearing Apparel in Japan* (pp. 134), by Stanhope Sams.

No. 131, *South American Markets for Fresh Fruits* (pp. 163), by Walter Fischer.

No. 132, *Markets for Paper, Paper Products and Printing Machinery in Cuba and Panama* (pp. 44), by Robert S. Barrett.

No. 133, *Market for Boots and Shoes in Cuba* (pp. 46), by Herman G. Brock.

No. 135, *Market for Boots and Shoes in Porto Rico* (pp. 28), by Herman G. Brock.

No. 137, *Textiles in Porto Rico and Jamaica* (pp. 31), by W. A. Tucker.

No. 138, *Cotton Goods in British India, Part III, Burma* (pp. 52), by Ralph M. Odell.

No. 139, *Markets for Construction Materials and Machinery in Cuba* (pp. 61), by W. W. Ewing.

No. 140, *Markets for Agricultural Implements and Machinery in Brazil* (pp. 59), by Frank H. von Motz.

In the Miscellaneous Series:

No. 53, *The Cane Sugar Industry: Agricultural, Manufacturing and Marketing Costs in Hawaii, Porto Rico, Louisiana, and Cuba* (pp. 462).

No. 58, *Cotton Textiles: International Trade and Merchandising Methods* (pp. 19).

No. 59, *Methods of Computing Values in Foreign Trade Statistics* (pp. 23), by J. J. Kral.

In the Tariff Series:

No. 30A, *Supplement to Foreign Import Duties on Motor Vehicles and Accessories* (pp. 17).

The federal Bureau of the Census has made a *Study of Cartage Costs in the City of Washington*, prepared by Eugene F. Hartley (Washington, 1917, pp. 14). It is estimated that the total cartage cost for the city of Washington in 1916 amounted to \$8,300,000 as compared with \$7,250,000 for inbound freight. 128 establishments reported their costs, showing the cost of delivery to be 6.2 per cent of gross sales. For ice the delivered cost was 45 per cent; for bottled soft drinks, 20 per cent; for brick, 20 per cent; bakery products, 20 per cent; and laundered goods, 15 per cent. For department store merchandise the cost was 1.5 per cent and for milk it ranged from 12 to 10 per cent of the selling price.

An Economic Study of Farming in Sumter County, Georgia, published by the United States Department of Agriculture as Bulletin No. 492, is prepared by H. M. Dixon and H. W. Hawthorne (Washington, Feb. 10, 1917, pp. 64). It is based upon a study of 531 farms with particular reference to the economic significance of tenure, size of farm, farm organization, crop yield, and cost of cotton production.

Bulletin No. 476 of the Department of Agriculture is devoted to a *Study of Cotton Market Conditions in North Carolina with a View to their Improvement* (Washington, March 29, 1917, pp. 18).

Circular No. 66 of the Department of Agriculture summarizes *Suggestions for the Manufacture and Marketing of Creamery Butter in the South* (Oct. 25, 1916, pp. 11).

A letter from the Federal Trade Commission on the *News-Print Paper Industry* has been published as Senate Document No. 49, 64 Cong., 1 Sess. (Washington, June 13, 1917, pp. 162).

The Commission on Living Costs in Rhode Island, under date of January 29, 1917, published Part II on *Food Products* (Providence, pp. 21).

The State Bureau of Labor of Washington has made a compilation of *Comparative Statistics on Foodstuffs and Fuel* for four years as shown in a budget of the annual cost of living of a family of five persons (Olympia, Apr., 1917, pp. 3).

The development of farm markets in Idaho is discussed in the *Second Annual Report of the Director of Farm Markets* (Boise, Dec. 15, 1916, pp. 27). The *Laws Governing Farm Markets Department* as amended in 1917 have also been issued as a reprint (pp. 16).

The Canal Committee of the Chamber of Commerce of Buffalo, N. Y., has made a report on *Ship Channel between Lake Erie and Lake Ontario* (pp. 54). This reviews the history of inland waterways projects in relation to New York state, Lake Erie, and Lake Ontario.

Corporations

REPORT ON THE PRICE OF GASOLINE IN 1915. The Federal Trade Commission during the latter part of 1915 was deluged with complaints from all parts of the country, charging that the price of gasoline was unreasonably high and was discriminatory as between different purchasers. Though the commission was then conducting an investigation of the petroleum industry in all its phases, it deemed it in the public interest to undertake a special investigation. This report (*Price of Gasoline in 1915*, Washington, April 11, 1917, pp. xv, 224) is the result of that inquiry. Professor Lewis H. Haney greatly assisted in the preparation of the report, and the commission fittingly acknowledges his services.

We may pass over the statistical inquiry into the course of gasoline prices. The significant part of the report for economists lies in the findings of the commission as to the effectiveness of the dissolution decree of 1911 and in its recommendations for future legislation.

The conclusion of the commission was that in spite of the dissolution decree there was little, if any, competition between the former subsidiaries of the Standard Oil Company of New Jersey (the holding company) in the marketing of gasoline—the chief refined product of crude oil. The subsidiaries which are engaged in marketing gasoline are the Standard Oil Companies of New York, New Jersey, Kentucky, Ohio, Indiana, Nebraska, California, and Louisiana, the Atlantic

Refining Company, the Continental Oil Company, and the Magnolia Petroleum Company. The commission pointed out that these eleven Standard companies have with respect to gasoline "maintained a complete division of territory embracing the whole country and that almost without exception each Standard marketing company occupies and supplies a distinct and arbitrarily bounded territory." Thus, the Standard Oil Company of New York occupies the whole of New York state and of the New England states, but no other territory; the Atlantic Refining Company, the whole of Pennsylvania and Delaware, but no part of any other state; and the Standard Oil Company of New Jersey, the states of New Jersey, Maryland, Virginia, West Virginia, North Carolina, and South Carolina.¹ The only exceptions to this division of territory are found in Oklahoma and Arkansas. In Oklahoma—the territory of the Magnolia Petroleum Company—the Standard Oil Company of Indiana has a few tank-wagon stations in the northern part of the state; and in Arkansas the Magnolia Petroleum Company and the Standard Oil Company of Louisiana have stations. None of the "independent" concerns, it should be observed, have territories limited in this fashion. The Texas Company, for example, sells gasoline in thirty-two states and the District of Columbia, and covers ten of the eleven Standard marketing territories. The Gulf Refining Company, the Indian Refining Company, the National Refining Company, the Pure Oil Company, and the Cudahy Refining Company all do business in at least two of the Standard marketing territories, and are able to make profits in competition with each other and the Standard companies.

Moreover, the boundaries of these Standard territories are arbitrary. Almost without exception they conform to state lines. And of course it is clear that state lines, being political boundaries, do not represent the most economical boundaries from the standpoint of distribution. Thus, the Standard Oil Company of Ohio, with a refinery in the northern part of the state, supplies the southern part of Ohio, in spite of the fact that the Standard of New Jersey has a refinery at Parkersburg, West Virginia, just across the southern border of Ohio. Division of territory by state lines, obviously an uneconomical arrangement, would appear to have been adopted for the reason that such a division offers no opportunity for encroachment, and thus avoids disputes.

Further evidence of the absence of competition between the eleven

¹ A map opposite page 22 shows the details.

Standard marketing companies is given by the marked inequalities in the price of gasoline in one territory as compared with another. The report gives numerous illustrations of these inequalities, but it suffices to say that they cannot be explained away on the ground of differences in the cost of refining or of distribution. Were competition effective these inequalities clearly would not persist. The Standard companies in low price territories would make sales in the high price territories, and this would tend to eliminate all differences in price except such as were the result of differences in cost. It is true that some Standard marketing concerns do make shipments into the territory of other Standard concerns; these inter-territory shipments amounted in 1915 to over 200,000,000 gallons. But these shipments represent sales to the company whose territory is "invaded," and the latter is therefore free to dispose of the gasoline as its own product and at such prices as it sees fit. Obviously such sales have no tendency to equalize prices; they permit each company to maintain that monopoly price which yields it the maximum net profit. This they are enabled to do by virtue of the dominant position which they occupy in the trade. The commission estimated that the Standard companies controlled approximately 65 per cent of the gasoline business throughout the United States.² The "independents" would thus control about 35 per cent; yet by no means all of this may be regarded as competitive, since it includes the sales of companies, such as the Tidewater Oil Company, in which Standard stockholders have large interests. Moreover, the facts seem to show that though the "independents" compete for business, they follow the *prices* fixed by the Standard companies, charging a high price in those territories where the price is "fixed" high, and a low price where it is "fixed" lower.

The explanation of the lack of competition between the Standard marketing companies, the report brings out, is the existence of a community of interest among these companies based on common stock holding. This community of interest, it should be noted, includes the oil-producing, the pipe-line and the refining companies, as well as the marketing companies. The stockholder lists of the Standard companies as of January, 1915, make it clear that although some changes in the personnel of the stockholders have come about since the dissolution, a majority of the stock of most of the companies continued to be held by the same small group. For example, 55 per cent of the stock of the Atlantic Refining Company was held by the comparatively small group owning 300 shares or more; and this same

² The approximate percentages by territories are given on page 144.

group held over 50 per cent of the stock of the Prairie Oil and Gas Company, the Prairie Pipe Line Company, the Continental Oil Company, and the Standard Oil Companies of New Jersey, New York, Ohio, Indiana, Kentucky, and Nebraska. (If the holdings under 300 shares were included, the percentage of common holding would amount to approximately 70 per cent.) Moreover, the Standard Oil Company of New Jersey owned practically all of the stock of the Standard of Louisiana and of the Carter Oil Company; and the presidents of the Standard of New Jersey and of New York owned about 70 per cent of the stock of the Magnolia Petroleum Company. A community of interest among the eleven Standard marketing companies and with crude oil and pipe line properties is thus established.

In addition, the leading officers and directors of the Standard companies are frequently stockholders in several other Standard concerns. To cite one instance, the president of the Standard of New Jersey owned 6,000 shares (worth \$3,258,000 at the end of 1915) in his own company, 4,575 shares (worth \$1,029,375) in the Standard of New York, 1,858 shares (worth \$1,012,610) in the Standard of Indiana, 1,100 shares (worth \$180,150) in the Prairie Oil and Gas Company, and 300 shares (worth \$207,000) in the Atlantic Refining Company. Such common stock holdings naturally tend to restrain competition between the separate companies.

The conclusion of the commission was that the combination which was supposed to have been disintegrated remained a combination in fact, if not in law—a combination based on a community of interest, which in turn was the result of the interownership of stock. In making this statement, however, the commission was careful to say that it did not charge the Standard companies with violating the decree, for common ownership was not prohibited by the dissolution decree. Neither did it intend to criticise the decree itself. The Standard Oil Company being the first important trust to be dissolved, the decree might be regarded as an experiment. But it was the deliberate judgment of the commission that the experiment of dissolving corporations without separating owners had not achieved the desired purpose, which was to restore effective competition. In reply to the argument that at some time in the future a redistribution of territory might be brought about by the “operation of economic laws,” the commission said that there was not sufficient evidence of a tendency to a substantial rearrangement of territory to warrant a reliance upon time and the laws of trade. In reply to the argument that the duplication of plant

facilities made necessary by competition was socially undesirable, the commission declared that the cost of such duplication was the price of competition, and in this industry, in its judgment, competition was worth the price.

In view of the striking facts brought out as the result of its investigation, the commission, in accordance with the duty imposed upon it by section 6 (f) of the Trade Commission act, recommended that Congress enact legislation to remedy the unfortunate state of affairs thus disclosed. Its suggestions, so far as they related to common ownership, were: (1) A law providing for the reopening of antitrust cases on the application of the Attorney General by a bill of review for the purpose of securing such modifications of decrees as new conditions might require. (2) The abolition by legislation of common stock ownership in corporations which have been members of a combination dissolved under the Sherman law, where these companies are engaged in the same line of commerce; or, in other words, to enact into law the doctrine laid down by the courts in the *Union Pacific* and *Reading* cases. (3) As an alternative to the above, an effective limitation upon common ownership of stock in potentially competitive corporations by withdrawing the power of voting and control.³ (4) If Congress deemed it inadvisable to prevent common ownership, with its almost inevitable restriction of competition, the commission recommended the enactment of legislation which would fix upon the common owners of stock in potentially competing concerns the responsibility for such acts of these concerns as resulted in the prevention of competition. With respect to the pipe lines, the commission urged that the best policy would be to apply the principle of the commodity clause, and segregate the ownership of the pipe lines from the other branches of the petroleum industry.

These recommendations of the commission are timely. The oil trust has been chased from a "legal" into a "liquidating trust"; thence into the holding company organization; and as the result of the government suit of 1906 into a community of interest arrangement based on common ownership of stock. The commission in recommending that we complete the chase demonstrates that it is a progressive and courageous body, willing to advocate far-reaching remedies, when such

³ It is interesting to note that President Wilson in his message of January 20, 1914, merely suggested that the owners of stock in companies which ought to be independent, but which on account of common stock ownership were not, might be required to decide in which of them they would elect the right to vote.

are seen to be necessary to restore competitive conditions, and thus give effect to the public policy to which the country is committed.

ELIOT JONES.

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REPORT OF THE ROYAL COMMISSION TO INQUIRE INTO RAILWAYS AND TRANSPORTATION IN CANADA. In July, 1916, a royal commission was appointed by the Canadian government, consisting of Mr. A. H. Smith, of the New York Central, Sir George Paish, and Sir Henry Drayton, of the Dominion Board of Railway Commissioners, to make a complete survey of the railway situation in Canada. It being found that Sir George Paish was unable to act owing to illness, Mr. W. M. Acworth was appointed in his stead. The commissioners met under the chairmanship of Mr. Smith, and proceeded to perfect their organization for what, it must be conceded, was a gigantic task. Professor Swain, of Harvard University and the Massachusetts Institute of Technology, was retained to make a detailed examination, with the help of a corps of engineers, of the physical properties of the various railroads concerned, and notably of the Canadian Northern and the Grand Trunk Pacific. Mr. A. H. Smith and Sir Henry Drayton spent some weeks inspecting the railroads of the country, for that purpose travelling upwards of 10,000 miles and visiting all important points from Halifax to Vancouver and Prince Rupert. They conferred with many representative citizens at important centers along the railway lines; and received voluminous reports and statistics from the railway companies concerned. Formal hearings were held in Toronto and Montreal at the offices of the Canadian Northern and the Grand Trunk Pacific. They studied the situation as they found it in the autumn and winter of 1916-1917; and report that they are in substantial agreement as to the necessity for offering constructive aid in bringing the railways through the present crisis. They differ, however, as to the extent and method of government help desirable, and as to the increase and character of government liability and interest now and for the future. The report presented (*Report of the Royal Commission to Inquire into Railways and Transportation in Canada*, Ottawa, 1917, pp. cv, 86, 15c.) therefore includes two reports—a majority report signed by Mr. Acworth and Sir Henry Drayton, and a minority report by Mr. A. H. Smith. As these differ radically in their findings, it will be necessary, first of all, to outline the Canadian railway situation as they found it.

In the first place, the investigation was made imperative owing to the financial disabilities under which the Canadian Northern and the

Grand Trunk Pacific found themselves operating in 1914. It will be recalled that the Grand Trunk Pacific was promoted and constructed by the Grand Trunk Railway System, the pioneer railway of Canada. Under its agreement with the Dominion government, the latter was to build that part of the projected transcontinental system stretching between Winnipeg, Manitoba, and Moncton, New Brunswick, on the Atlantic seaboard. This part of the line, while built at government expense, was to be leased to and operated by the Grand Trunk Pacific for a period of years, the first seven-year period to be free of interest, and thereafter 5 per cent to be paid on the capital cost. The Grand Trunk Pacific, on the other hand, was to build and operate that part of the line running between Winnipeg and Prince Rupert, on the Pacific coast. It will be observed that, by this arrangement, the government was to build by far the costliest part of the completed system, the lines from Winnipeg westward being constructed largely on the prairies. Owing to the fact that the estimated cost of the government's portion of the road, \$67,000,000, was greatly exceeded, finally amounting to \$200,000,000, the Grand Trunk Pacific found itself faced with a very serious situation in 1914, at the outbreak of war. It was, in fact, not earning the cost of operation on its own section of the Transcontinental; and it did not seem possible, in the circumstances that arose, to earn operating costs on the line between Winnipeg and Moncton, not to mention the 5 per cent rental that it would be compelled to pay on the government-built portion costing \$200,000,000. It was compelled to draw upon the Dominion Treasury for financial assistance, and finally to repudiate its agreement with the government altogether.

The Canadian Northern also found itself hard hit by the outbreak of war, and the crisis that had arisen in Canada's internal trade. Starting in a small way in Manitoba, this line expanded into a profitable Gran-ger system in the three prairie provinces of Manitoba, Saskatchewan, and Alberta. Under the daring, and, it must be admitted, clever direction of Sir Donald MacKenzie and Sir William Mann, the Canadian Northern was carried all the way across the continent from Vancouver, on the Pacific, to tide-water at Quebec. Unfortunately it, too, was nearing completion when war was declared in August, 1914. It will be recalled that the British government immediately forbade the flotation of loans on colonial account, except in case specific approval was given. Messrs. MacKenzie and Mann found themselves unable to secure the needed capital to equip their lines and to provide adequate rolling stock, in London; and their securities were, for the time being, unsalable in New York. With a depleted income account, the Canadian

Northern found it impossible to cover operating expenses, and the Dominion government was obliged to come to its support. In view of the fact that it did not seem possible for the Grand Trunk Pacific or the Canadian Northern to make financial headway in the immediate future, without continued government support, the government decided to appoint a commission to thoroughly examine the situation and suggest the best methods of grappling with it. Hence the report under consideration.

The commissioners were directed, to examine specifically, and to report upon, the following points:

1. The general problem of transportation in Canada.
2. The status of each of the three transcontinental railway systems with special reference to:
 - a. The territories covered by each system and the service which it is capable of performing in the general scheme of transportation;
 - b. Physical conditions, equipment and capacity for handling business;
 - c. Methods of operation;
 - d. Branch lines, feeders and connections in Canada;
 - e. Connections in the United States;
 - f. Steamship connections on both oceans;
 - g. Capitalization, fixed charges and net earnings, having regard to (1) present conditions, and (2) probable future development with increase of population.
3. The reorganization of any of the said railway systems, or the acquisition thereof by the state; and, in the latter case, the most effective system of operation, whether in connection with the Intercolonial Railway or otherwise.

The commissioners have reported exhaustively on all these points, and have presented a document of enduring value to all economists, but especially to the people of Canada. It will not be possible, however, in this brief survey, to do more than touch upon the main findings. In the first place they draw attention to the fact that Canada has a railway mileage, in round figures, of 40,000 miles—a very great amount in comparison with its present population of 7,500,000. This mileage far surpasses that of the United Kingdom and of France, with populations of 46,000,000 and 40,000,000 respectively. It is equal to that of the German Empire with its population of 67,000,000 and of India with 300,000,000. The Canadian mileage is more striking when compared with that of Australia—18,390 for a population of 5,000,000; or with Argentina,—20,290 for 5,000,000. Canada has one sixth the

railway mileage of the United States, although its population is only one fourteenth that of the republic. To put these facts in another way: Canada has 185 persons for each mile of railway; the United States 400 for each mile, Australia 274, Argentina 238, the United Kingdom 2,000 and Russia 4,000. And what is of equal importance, the Dominion has a magnificent system of inland waterways which will always carry a large part of the country's traffic. If area be considered, Canada will be found, of course, far down the list, but areas represent potentialities rather than actualities. These facts are fundamental and must be kept in mind in studying the Canadian railroad problem. The truth is that, in proportion to traffic and population, Canada has largely discounted its railroad future.

The test of successful railway operation is found in the return on invested capital. Taking into account taxes, rents, and similar items which relate to operation, the relation of net operating income to cost of equipment and road for the Canadian railways, comes out as follows:

ROAD	Net operating revenue	Net rents, hire of equipment, taxes, etc.	Total	Per cent on property investment
Canadian Pacific . . .	\$46,416,743	\$2,109,477 Dr.	\$41,307,266	(Per cent) 8.34
Canadian Northern . .	10,232,088	1,241,465 Dr.	8,990,623	2.28
Grand Trunk	10,373,027	469,926 Dr.	9,903,101	2.33
Grand Trunk Pacific (excluding branch lines)	1,060,346	1,153,283 Cr.	2,213,629	1.15
Transcontinental . . .	429,455	1,371,070 Dr.	948,615 Dr.	Deficit
Intercolonial	2,363,478	167,214	2,196,264	1.88

With the exception of the Canadian Pacific, it is seen from the above table that the return is so low on the investment of property in Canadian railroads that the country has built a greater mileage than can be justified on commercial grounds.

The Canadian people are seriously concerned over the present railway situation, not only because the credit of the country is in peril, but also because very large public grants in the form of cash, or lands, or guarantees of securities, or all combined, have been made to the eight main railroads in the country—the Canadian Pacific, the Canadian Northern, the Grand Trunk Railway, the Grand Trunk Pacific, the Grand Trunk Pacific Branch Lines, the National Transcontinental, the Intercolonial, and the Prince Edward Island. Not counting the loss of interest for many years upon the investment in roads operated by the government,

the commissioners find that the people of Canada have provided, or guaranteed the payment of, sums totalling \$968,451,737. This works out at over \$30,000 per mile of road. But even this is not all. In addition they have granted great areas of land as yet unsold and unplugged. They have undertaken the construction of other lines whose cost will be an important addition to this large outlay. Further, in the case of some of the companies to which they have given or lent large sums of money to meet pressing needs, they have voluntarily accepted security ranking after the bulk of private capital already put into the undertaking.

The majority report recommends that a new public authority, a board of trustees, be incorporated by act of Parliament, as "The Dominion Railway Company;" and that this board take over the Canadian Northern, the Grand Trunk, and the Grand Trunk Pacific. The Canadian Pacific is to be left under its present management. The commissioners who signed the majority report further recommend that the government assume responsibility to The Dominion Railway Company for the interest on the existing securities of the transferred companies. In the scheme as outlined, the Intercolonial and the National Transcontinental will also be transferred to the new company. The commissioners recommend that the whole of the Dominion's railways be operated by the trustees as one united system, on a commercial basis, under their own politically undisturbed management, on account of, and for the benefit of, the people of Canada. They suggest that there shall be five trustees—three railway members, one member selected on the ground of business and financial experience, and one as specially possessing the confidence of railway employees; that the original trustees be named in the act constituting the board; and that their tenure of office be substantially the same as that of judges of the supreme court. It will be seen, therefore, that the commissioners reject absolutely, in the majority report, government ownership of the Canadian railroads.

On the other hand, Mr. A. H. Smith comes to quite contrary conclusions. He rejects the above scheme as being, in essence, but only in a disguised form, a species of government ownership. In brief, his findings are as follows: He would leave the Canadian Pacific alone, and would have the Grand Trunk operate the eastern line now held by that company, and also the eastern line of the Canadian Northern. On the other hand, he would let the Canadian Northern operate the western lines now held by that company, as well as those of the Grand Trunk System, and have the government operate the connections, or procure

their operation by private companies. He is of the opinion that all this can be done under an arrangement that will be just and equitable to all concerned; and expresses the opinion that the day is not distant when the country will have survived the war and resumed its prosperous growth.

It is difficult to say at present which of these recommendations will be accepted by the government. It would appear, however, that no action will be taken in the way of government ownership of the railways till after the war, owing to financial and other difficulties.

At the same time it is imperative, according to both reports, that the government give further financial assistance to both the Grand Trunk and the Canadian Pacific in order that adequate equipment may be provided for traffic purposes during the course of the war.

W. W. SWANSON.

The University of Saskatchewan.

THE REPORT ON THE CITIZENS WATER SUPPLY OF NEWTOWN (pp. 378, Oct., 1916) made to the Commissioner of Water Supply, Gas, and Electricity of New York by Delos F. Wilcox is a careful examination of the causes of friction in the relations between the city of New York and residents therein, and one of the water supply companies of the city. As a description of the complicated and involved situations which frequently arise in American cities resulting from old disputes, obscure transactions, lack of foresight, and changing municipal policies, it is highly valuable and illuminating. Aside from its discussion of purely local problems, such as the schedule of rates and practices recommended, and the consideration of the desirability and methods of municipal purchase, its greatest value is in its general reasoning regarding valuation and rate making. Here the author makes a positive contribution to the literature of public utility regulation.

In the discussion of rates for fire protection the report states that hydrant rentals in New York, as elsewhere, have been based largely upon guess work and bargaining. Dr. Wilcox seeks a more accurate and scientific basis for hydrant rentals. He is unwilling to accept the theory of the Wisconsin commission, under which fire protection and service to private consumers are regarded as coördinate, each being required to bear its proportionate share of expenses, upon the ground that it would place too heavy a burden upon the city. He holds that the company established its plant primarily to serve private consumers, that fire protection is an incidental service imposed upon it by law.

Therefore, he maintains that it is necessary to estimate the cost of a substitute plant, adequate to serve all the private consumers, and having determined the value of the present plant which serves both the city and private consumers, to deduct from this the cost of the substitute plant. The difference represents the investment attributable to fire protection.

Obviously, this theory makes the cost of fire protection to the city less, and the cost of private service more, than would be the case under the Wisconsin theory. For example, under this "excess-investment" rule, Dr. Wilcox finds that 100 per cent of the water supply system and works, 100 per cent of the buildings and mechanical equipment, and 70 per cent of the distributing system are attributable to private users, whereas the Wisconsin commission, under its theory, has found that 40 to 60 per cent of the fixed charges upon investment in water plants, is chargeable to fire protection alone. It would seem to be a fair question, whether fire protection has not come to be of coördinate importance with serving private consumers, regardless of what a company's purposes may have been when it was originally organized.

The appraisal of the physical property was conducted upon a basis of reproducing the identical plant, but under the physical conditions which prevailed at the time it was constructed. This principle avoids many of the absurd claims which have sometimes been advanced under cover of "cost of reproduction," as, for example, claims for value on account of pavements laid by a municipality, subsequent to the laying of mains.

In discussing lands acquired in advance of present needs, the report states:

If . . . a water company has purchased water-bearing lands several years in advance of their necessary use . . . it is now clearly established that the burden of carrying the lands from the time of their purchase up to the time when their use for public service is reasonably necessary cannot be imposed upon the water consumers, but must be borne by the stockholders of the company.

The reasoning is, that when the lands do actually come into use the company will be permitted to earn a fair return upon their then value. If this value proves to be more than the purchase price plus carrying charges, the company profits by the exercise of its good business judgment. If it proves to be less, the company loses by the mistake in its business judgment. The issue here would seem to turn largely upon the basis of valuation which is to be used. If original cost is to be

used, it would frequently prove advantageous to the public if the utilities would buy land in advance of present needs, even though such land be included in the valuation, before it is actually used. On the other hand, if present value is to be the controlling factor, as it generally is, such a course would frequently prove disadvantageous to the public.

The question of land is further considered under "going value." The issue here was the appreciation in land values, which had largely increased the company's surplus, and which might be regarded as a partial offset to accrued depreciation. Dr. Wilcox states:

. . . If in the course of the development of its business it (a utility company) finds occasion . . . to sell off land at a profit, the entire proceeds should be reinvested in the property, or else the capital account should be diminished to the extent of the withdrawal of funds. The stockholders of a public service corporation are not entitled to sequester the profits from land transactions, and at the same time to compel the consumer to make good all losses through wear and tear and obsolescence of depreciable structures.

This principle appears perfectly sound, but it is one which has ordinarily been overlooked.

In considering the rate of return to be allowed, attention is called to the fact, that the company enjoys neither a complete monopoly of present service nor assurance against future competition. The author admits that, theoretically, the existing and prospective perils of competition might justify a high rate of return. But, he states:

In this particular case the fixing of higher rates, because of such perils, might increase those very perils. The medicine, instead of curing the disease, would aggravate it. The one thing most potent in stimulating competition is high rates, and if the rates were increased to recompense the company for this danger, the likelihood of potential competition becoming actual would only be strengthened.

Obviously, this theory, like many others in the field of public utility control, might be carried so far as to render it absurd. It might be construed to mean that the greater a company's insecurity the lower should be the rate of return, in order to produce greater security. But, of course, this is not Dr. Wilcox's meaning, as is evidenced by the fact that he allows 7 per cent as a reasonable rate of return. The principle here advanced is important, because it calls attention to the fact that a utility is not to be permitted an unduly high rate simply because it has no definite assurance against the possibility of future competition.

RALPH E. HEILMAN.

Northwestern University.

Additional material relating to the federal valuation of railways in the United States published by the Presidents Conference Committee (937 Commercial Trust Bldg., Philadelphia) is as follows:

Statement Prepared by H. C. Phillips, General Secretary, of the Developments in Connection with Federal Valuation, as of February 10th, 1917 (pp. 15).

Circular Communication to the Chairmen of Valuation Committees, in Reference to the Supplement to Interstate Commerce Commission Valuation Order No. 7—Schedules of Land (Apr. 10, 1917, pp. 6).

Statement Prepared by H. C. Phillips, General Secretary, of the Developments in Connection with Federal Valuation, as of April 20th, 1917 (pp. 18).

Statement of Developments in Connection with Federal Valuation as of July 2nd, 1917 (pp. 11).

Tentative Valuation by Interstate Commerce Commission, February 14, 1917, Elgin, Joliet & Eastern Railway with its Leased Lines (pp. 17).

There have also been published from the office of the Presidents' Conference Committee hearings *Before the Interstate Commerce Commission* on the valuation of the Atlanta, Birmingham & Atlantic Railroad Company; Georgia Terminal Company and Alabama Terminal Company; and the Texas Midland Railroad Company (Feb. 3, 1917, pp. 320); also *Hearings* held March 19-31, 1917, before the commission, in regard to these same roads and additional lines (pp. 935).

Three pamphlets by James B. Nelson, member of the Valuation Committee of the Chesapeake and Ohio Railway Company, have been received, which bear the following titles: *Federal Valuation of Common Carriers under Act of March 1, 1913* (pp. 36); *Some Comments on Federal Valuation of Common Carriers*, an address delivered before the Richmond Railroad Club, February 12, 1917 (pp. 27); *The Chesapeake and Ohio Railway* (pp. 21).

The Guaranty Trust Company of New York has published a pamphlet on *The Railroad Situation* (1917, pp. 26). The National City Company has also issued a pamphlet under the same title, prepared by Pierpont V. Davis, manager of the railroad department of the National City Company (pp. 13).

The United States Department of Agriculture has recently issued Bulletin No. 387 on *Public Road Mileage and Revenues in the South-*

ern States, 1914 (Washington, 1917, pp. 52, lxxi). This shows the mileage of improved and unimproved roads, sources and amounts of road revenues, bonds issued and outstanding, and a description of the systems of road administration, fiscal management, and other factors affecting road improvement in each state.

The Philadelphia Bourse has made a report on an investigation which has been under way for more than a year and is summarized under the title *The "Philadelphia Plan" for Unified Regulation of Railroads* (Philadelphia, May 1, 1917, pp. 40). This report urges the federal incorporation of companies engaged in interstate commerce; exclusive power of regulation by the Interstate Commerce Commission; the reorganization of this commission into regional commissions subordinate to an appellate body; a more precise definition of the powers of the commission; and a transfer of the powers of investigation and prosecution from the commission to some other agency of the government.

A brief has been received, prepared on behalf of the state of New York, the Chamber of Commerce of the state of New York, and the Merchants' Association, presented to the Interstate Commerce Commission, *Docket No. 8994, The Committee on Ways and Means to Prosecute the Case of Alleged Railroad Rate and Service Discrimination at the Port of New York, et. al., vs. The Baltimore & Ohio Railroad Company, et. al.* (pp. 165). The brief is prepared by Julius Henry Cohen, counsel, and contains a considerable amount of historical material in regard to the early commercial development of New York and New Jersey.

A reprint has been made of a statement of L. F. Loree, president of the Delaware and Hudson Company, before the Interstate Commerce Commission, May 7, 1917, in relation to an *Advance in Freight Rates* (pp. 8).

The Department of City Transit, of Philadelphia, has published an exhaustive report upon *Proposal of the Philadelphia Rapid Transit Company for the Equipment and Operation of City-Built High-Speed Lines* (p. 148). This was submitted to the Common Councils of Philadelphia, March 29, 1917. The contract which was proposed by the Philadelphia Rapid Transit Company is analyzed from four points of view: public policy, necessity, and convenience; legal; construction and engineering; and financing or feasibility. There are a large number of diagrams illustrating the analyses.

Among recent public utility reports to be noted are:

Thirty-second Annual Report of the Railroad and Warehouse Commission of Minnesota for 1916 (Minneapolis, pp. 388).

Second and Third Annual Reports of the Public Utilities Commission of Colorado, 1915-1916 (Denver, pp. 175).

Thirty-second Annual Report of the Board of Gas and Electric Light Commissioners of Massachusetts (Boston, 1917, pp. 267; 533).

Second Annual Report of the Public Utilities Commission of Maine, 1916 (Augusta, pp. 590).

Annual Report of the Public Utilities Commission of Ohio, 1915 (Columbus, 1916, pp. 466).

The Board of Gas and Electric Light Commissioners of Massachusetts has published in pamphlet form a compilation of *New Legislation of Especial Interest to Gas, Electric and Water Companies and Municipalities Owning Lighting Plants* enacted in 1917 (Boston, pp. 32).

The city of Chicago and the Peoples Gas Light & Coke Co. of that city have accepted an ordinance governing the rates and standards of service, prepared by Edward W. Bemis, consulting engineer, and Donald R. Richberg, attorney, representing the city of Chicago. This ordinance introduces some important new features. It permits a gradual reduction in candle power until in 1919 only a heat unit standard will be required. It requires a reduction in price from 80 cents to an average of 72½ cents per M feet and a large share in profits with the city beyond a certain amount. It requires liberal furnishing and maintenance of mantles to the consumer by the city; opens all the books and property of the company to examination by the city's experts at any time; and at any time after one year permits of such readjustment of rates or heat standards as the valuation of the property now under way and experience during the next year or two may render advisable. Meantime, the company also contracts to put in a large coke oven plant which will render possible a material reduction in price within three years and also will relieve the market of a large demand for gas oil, thus having a tendency to lessen the rise in the price of oil.

Labor

THE OREGON MINIMUM WAGE CASES. The Supreme Court of the United States rendered a decision on April 9, 1917, which upholds the Oregon minimum wage law. This decision establishes the right of a state to enact a minimum wage law as a health measure. The two cases that were before the court, were first argued in December, 1914.

The brief submitted at that time was prepared by Mr. Louis D. Brandeis, later appointed an associate justice, and Miss Josephine Goldmark. The cases were reargued in October, 1916, by Mr. Felix Frankfurter, the original brief being amplified and brought down to date.

In form this brief (*Oregon Minimum Wage Cases*. Supreme Court of the United States, October term, 1916, nos. 25 and 26, Washington, Superintendent of Documents, 1917, pp. vi, 783) is similar to the well-known briefs that were prepared by Mr. Brandeis and Miss Goldmark and submitted in the shorter hours cases. In the present instance, the statement of the case and the argument occupy 54 pages. Then follows Part First, which consists of 76 pages devoted to the legislation on the subject, including the important sections of the laws in Victoria and Great Britain. The American legislation is given in full. Finally, Part Second, 687 pages, consists of a well-selected and well-organized collection of information which aims to set forth the experience upon which minimum wage legislation is based. This information is drawn from a wide variety of sources. Cuttings from government documents, and public and private investigations, statements of eminent economists, sociologists, publicists, social workers, and statesmen have been marshalled to show the evils resulting from low wages and the benefits that flow from adequate wages. A classified index of the source materials quoted concludes the brief.

The information compiled in the second part of the brief is in itself a valuable piece of work. It is not only well adapted to its immediate purpose but, because of the wide variety of sources from which the information has been drawn, it will be found useful in aiding subsequent study of this important social and economic question. As a method of presenting the latest information bearing on the legal phases of the subject, the brief will impress the layman as a model. It brings to the court matters of common knowledge, and in this respect departs from that form of brief which depends solely upon precedent for support for the argument on the case at bar. In this way current social philosophy can be impressed upon the court more effectively than when the attention of the judges is centered on the argument in previous cases. In a dynamic society, and especially in our own country where change in the fundamental law is difficult—depending largely on constitutional interpretation, it is highly important that current thought receive due consideration. Constitutional forms and theories will in this way be more speedily adapted to the needs of the present. This form of brief accomplishes this

end in an admirable way, and judged by the standard of results secured it has demonstrated its effectiveness. However, it might be argued that, independent of the brief, members of the Supreme Court have come under the influence and have accepted the essential justice of the social philosophy upon which legislation of this character rests. And yet an examination of this and similar briefs will convince the most skeptical that the briefs themselves have certainly contributed to this result.

Persons interested in other forms of social legislation, as, for instance, the efforts of organized labor to limit the use of the injunction in labor disputes, might well take their cue from the experience of the National Consumers' League with the movement for shorter hours and minimum wage laws for women, and organize their campaigns along similar lines. There can be little doubt that the intelligence put into these two movements is bearing fruit and the acceptance by the Supreme Court of the legal principles advanced is rapidly adjusting our constitutional theories to modern social and economic problems.

The argument of the brief is likewise of interest. There were two cases before the court, *Stetler v. O'Hara*, and *Simpson v. O'Hara*, on appeal from a decision of the supreme court of the state of Oregon. Stetler was a paper box manufacturer in Portland, and Simpson was an adult woman in his employ at a wage less than had been determined by the Industrial Welfare Commission in accordance with the minimum wage law of 1913. The plaintiffs made three attacks upon the act. They held that "Oregon was prohibited from enacting this legislation by the equal protection clause; the privileges and immunities clause; the due process clause." The first and second of these attacks were dismissed in this brief either because the phase of the question was adequately treated in the brief submitted to the supreme court of the state of Oregon, or was covered in the subsequent treatment of the due process clause. The real contentions reduced themselves, it was held, to a claim that the plaintiffs had been deprived of liberty or property without due process of law. The outline of the argument is as follows: (1) Oregon by this legislation aimed at "ends" that are "legitimate" and "within the scope of the constitution"; (2) The "means" selected by Oregon are "appropriate and plainly adapted" to accomplish these ends; (3) No right of the plaintiffs secured under the constitution of the United States "prohibits" the use of these appropriate means so adopted by the state of Oregon to accomplish these legitimate public ends.

The purpose of the act was to protect women and minors against the pernicious effects of low wages, of wages less than sufficient "to keep labor going." While the state of Oregon might have tried other means for accomplishing this end than the one chosen, the brief holds that the state should be permitted to experiment with this method "unless it was affirmatively prohibited by the constitution." The brief concludes that the "end" is "legitimate" and the "means" are "appropriate and plainly adapted" to that end.

The remaining question was, Did the act deprive Stetler and Simpson of life, liberty, or property without due process? The essential point here involves what constitutes "due process," and the brief points to a long line of decisions in which the dominant ideas are (1) freedom from arbitrary and wanton interference and (2) protection against spoliation of property. The remainder of the brief is devoted to an analysis of the cases under consideration and to testing the act by the above principles of due process.

What liberty of the plaintiffs' was curtailed? According to the brief nothing but the "liberty" of not being required to get leave of the commission before making contracts below a living wage. Stetler complained that he was restricted to the employment of women "who are capable of performing labor sufficient to earn" \$8.64 or more. The "liberty" claimed by Stetler is the "liberty" to employ \$8 women for \$8 instead of \$8.64 women for \$8.64, which the brief holds to be a nominal and theoretical liberty.

The "liberty" which Simpson asserts as curtailed is similarly fictitious and theoretical. Her allegation was that \$8 is the "best wages and compensation for any employment or labor which she is capable of performing." The brief asserts that "here is an 'inspired' case filed not in her own interest, but in support of her employer's." The real question then is, Are these alleged rights "liberties" protected by the constitution?

Concerning the alleged deprivation of property the brief attempts to show that neither Stetler nor Simpson has been dealt with arbitrarily or wantonly, nor has there been any spoliation of their property. This line of reasoning is worked out in detail and supported by numerous decisions previously rendered by the Supreme Court.

There has been no attempt in this brief to argue in favor of the right of a state to enter the field of interfering with wage contracts except as a health and general welfare measure. Incidentally, other benefits are mentioned, such as the benefit to industrial peace, and to

competing employers, etc., but these occupy a much larger place in the second part of the brief than in the argument proper. The idea of the minimum in the argument is the absolute physical minimum. The rate of wage fixed by the commission is referred to as "the minimum cost of her labor." "It provides for only such quantity of food as will preserve her working energy and for shelter and clothing as will save it from the destruction of the elements." "The significance of this is that the expenditure by some one of every penny of this whole sum of \$8.64 upon Simpson goes to the operation of the industry and merely provides for the cost of that operation. It goes to the maintenance of the energy purchased by the employer and devoted to the industry." The significance, then, of the decision in these cases is that the police power has been extended to include the right of a state to interfere with the freedom of contract of adult women in respect to wages as a health measure.

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LABOR LAWS IN THE PACIFIC STATES. A very readable and thorough survey of the administration of labor laws in Washington, Oregon, and California is given by Hugh S. Hanna in *Labor Laws and Their Administration in the Pacific States*, which is Bulletin No. 211 of the United States Bureau of Labor Statistics and No. 9 in the Labor Laws of the United States Series (Washington, Superintendent of Documents, 1917, pp. 150). The author discusses carefully and fully the legislation then on the statute books (1915) affecting wage payments, unemployment, child and woman labor, compensation, mediation, safety, hours of work, and health regulations. Almost one half of the report is devoted to the subject of compensation for industrial accidents. An introductory statement describing labor and industrial conditions affords a background for the succeeding chapters. It stresses the prevailing seasonal industries which make for unemployment, the floating laborer, the lack of satisfactory provisions for the safety and health of the casual, and the employment of large numbers of women and children in such industries as crop-picking and canning.

After having read the monograph, one lays it down with the feeling that the author has drawn his data almost solely from the official reports of the commissions and boards of the states concerned and that he knows nothing whatsoever of the work of those boards from having had contact with them. One is also disappointed in not finding any story of the various struggles waged by labor unionists and those with

a social point of view in securing the legislation referred to. Another disappointing feature of the report is the total absence of either favorable or unfavorable criticism of the laws or their administration.

The report is what a strict interpretation of its title would suggest, a statement of labor laws and their administration; and as such it is a very satisfactory piece of work.

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Recent issues of the federal Bureau of Labor Statistics are:

No. 219, *Industrial Poisons Used or Produced in the Manufacture of Explosives*, by Dr. Alice Hamilton (Washington, 1917, pp. 41). This study is based upon an investigation extending through the larger part of the year 1916 in 41 factories located in New England, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and Indiana, employing about 90,000 workers. Of these, about one third are exposed to poisons. All were adult males. It was impossible to obtain accurate figures as to the amount of sickness and death caused by work in this industry since the war broke out, but in 28 plants in one year there were between two and three thousand cases of industrial poisoning reported. The experience with poisons is considered in detail.

No. 223, *Employment of Women and Juveniles in Great Britain during the War*, which is a reprint of memoranda of the British Health of Munition Workers Committee (April, 1917, pp. 121).

Some recent reports dealing with labor are as follows:

Report of the Department of Factory Inspection of Connecticut for the Two Years Ending September 30, 1916 (pp. 99).

Twenty-Seventh Report of the Bureau of Labor Statistics of Connecticut for the Two Years Ended November 30, 1916 (pp. 96).

Proceedings of the First Annual Convention of the Louisiana State Federation of Labor, April 2-3, 1917 (pp. 86).

Fifteenth Biennial Report of the Department of Labor and Industries of the State of Minnesota, 1915-1916 (pp. 195).

The Labor Laws of the State of Nevada (1917, pp. 51).

Inspection of Workshops, Factories and Public Buildings in Ohio, 1915, Bulletin of the Industrial Commission of Ohio, vol. III, no. 7 (Columbus, June, 1916, pp. 163).

Work of the Free Labor Exchanges of Ohio for the Year Ending

June 30, 1916, Bulletin of the Industrial Commission of Ohio, vol. III, no. 8 (Columbus, June, 1916, pp. 60).

Union Scale of Wages and Hours of Labor in Ohio on May 15, 1916, Bulletin of the Industrial Commission of Ohio, vol. IV, no. 4 (Columbus, March, 1917, pp. 72).

Twenty-third Annual Report of the Public Employment Office of the City of Seattle, Washington, 1916 (pp. 16).

Report of Survey Committee to the Dallas Wage Commission. (Dallas, Texas, pp. 16).

Money, Prices, Credit, and Banking

The Federal Farm Loan Bureau of the Treasury Department has issued Circular No. 7, *Killing off Mortgages. A Description of the Methods of Amortization and their Benefits to Borrowers* (Washington, June, 1917, pp. 16).

The Irving National Bank (Woolworth Bldg., New York) has published a pamphlet on the *Federal Reserve Act* (pp. 30) containing regulations, analyses, and indexes. This includes the amendments approved June 21, 1917, and the regulations issued by the Federal Reserve Board.

The Guaranty Trust Company of New York has also made a *Digest of the Federal Reserve Act* including amendments to June 21, 1917 (pp. 47).

The Post Office Department has issued a new edition of *Title Nine of the Postal Laws and Regulations Relating to the Postal Savings System as Amended* (Washington, July 1, 1917, pp. 71).

An address by Professor Ray B. Westerfield, of Yale University, on *Trade Acceptances*, delivered before the New Haven Association of Credit Men on April 19, 1917, has been published as a reprint.

Recent compilations of state banking laws have been made as follows: *Banking Laws of the State of Maine, 1917* (Augusta, Banking Dept., pp. 89).

A Compilation of the Laws of Minnesota Relating to State Banks, Compiled in 1915 (Minneapolis, Supt. of Banks, pp. 49).

Banking and Trust Company Laws of the State of Washington (Olympia, State Bank Examiner, 1917, pp. 163).

Laws in Relation to State Banks and Banking, Colorado, 1917 (Denver, pp. 24).

Annual state banking reports have been received as follows:

Indiana Bank Department, September 30, 1916 (Indianapolis, Auditor of State, pp. 298).

Annual Report of the State Bank Commissioner of Colorado, 1916 (Denver, pp. 213).

Report of the Commissioner of Banking, Michigan, December 31, 1916 (Lansing, pp. clii, 635). This includes the opinions of the attorney general relating to banking subjects.

Report of the State Banking Board of Nebraska, 1916 (Lincoln, pp. xxx, 421).

Ninth Annual Report of the Bank Commissioner of Rhode Island, 1916 (Providence, pp. xii, 309).

Annual Report of the Superintendent of Banks of New York relative to Savings Banks, Trust Companies, Investment Companies, Safe Deposit Companies, Personal Loan Companies and Personal Loan Brokers, 1916 (Albany, pp. 689).

Twelfth Annual Report of the State Banking Department of the State of Idaho, 1916 (Boise, pp. 143).

The following reports of state bankers' associations have been received: *Proceedings of the Twenty-fourth Annual Convention of the Alabama Bankers' Association, 1916* (McLane Tilton, Jr., secretary, First National Bank, Pell City, pp. 160), containing addresses on "Banking conditions in Alabama," by Joseph A. McCord; "Rural credit and colonization in relation to national defense," by Haveland H. Lund; and "The banker and the law," by Milton C. Elliott, including a discussion of the federal reserve system.

Proceedings of the Arizona Bankers' Association, vol. X, thirteenth annual session, Nov. 10-11, 1916 (Morris Goldwater, secretary, Prescott, pp. 134).

Proceedings of the Twenty-sixth Annual Convention of Arkansas Bankers Association, 1916 (Robert E. Wait, secretary, Little Rock, pp. 206), containing an address on "Rural credits," by A. D. Welton; "Warehousing of cotton," by Nathan Adams; and "Reciprocal bank relations, under the reserve act," by J. H. Ardrey.

Proceedings of the Fifteenth Annual Convention of the Colorado Bankers Association, July, 1916 (Paul Hardey, secretary, Interstate Trust Company, Denver, pp. 182).

Proceedings of the Twenty-sixth Annual Convention of the Illinois Bankers Association, October, 1916 (Richard L. Crampton, secretary, 208 South La Salle St., Chicago, pp. 280). containing addresses on

"The federal farm loan bank," by Senator Hollis, New Hampshire; "Accounting, collections, transit," by H. R. Aisthorpe; "Commercial paper purchased of brokers," by F. W. Crane; "Farm mortgage loans," by O. P. Bourland.

Proceedings of the Indiana Bankers Association Twentieth Annual Convention, October, 1916 (Andrew Smith, secretary, Indiana National Bank, Indianapolis, pp. 302), containing an address by William J. Gray on "The federal land bank."

Proceedings of the Twenty-fourth Annual Meeting of the Kentucky Bankers Association, October, 1916 (Arch B. Davis, secretary, Louisville, pp. 170).

Convention Proceedings of the Louisiana Bankers Association, 1916 (Eugene Cazedessus, secretary, Baton Rouge, pp. 144).

Proceedings of the Sixth Convention of the New Mexico Bankers' Association, 1916 (W. A. McMillin, secretary, Albuquerque, pp. 167).

Proceedings of the Twenty-third Annual Convention of the New York State Bankers' Convention, 1916 (William J. Henry, secretary, 11 Pine St., New York City, pp. 189), containing an address on "The federal reserve system and the banks," by Paul M. Warburg.

Proceedings of the Twenty-first Annual Convention of the Maryland Bankers Association, 1916 (Charles Hann, secretary, Merchants-Mechanics' National Bank, Baltimore, pp. 115).

Report of the Proceedings of the Sixteenth Annual Convention of the South Carolina Bankers' Association, July, 1916 (Julian C. Rogers, secretary, Florence, pp. 251). This contains an address on "Country banks and the collection system," by George B. Seay, governor of the Federal Reserve Bank of Richmond.

Report of the Twenty-fifth Annual Convention of the South Dakota Bankers' Association, 1916 (A. B. Darling, secretary, Western National Bank, Mitchell, pp. 144).

Proceedings of the Twenty-third Annual Convention of the Virginia Bankers' Association, 1916 (Walker Scott, secretary, Farmville, pp. 275).

Report of the Summer Convention of the Vermont State Bankers' Association, 1916 (C. S. Webster, secretary, Barton Savings Bank and Trust Company, Barton, pp. 63).

Proceedings of the Twenty-first Annual Convention of the Washington Bankers' Association, 1916 (W. H. Martin, Pioneer National Bank, Ritzville, pp. 206), containing a report of the taxation committee.

Proceedings of the Eighth Annual Convention of the Wyoming Bankers' Association, 1916 (Harry D. Henderson, Wyoming Trust and Savings Bank, Cheyenne, pp. 62).

Public Finance

THE TAX SYSTEM OF CONNECTICUT has recently been the subject of two investigations, one on the part of a special commission appointed by the governor (*State of Connecticut: Report of the Special State Commission Appointed in 1915 on the Subject of Taxation, Submitted to the General Assembly in 1917*, New Haven, 1917, pp. 44, tables), and the other by a committee of the state chamber of commerce (*Report of the Joint Committee on Taxation and State Finance to the Connecticut Chamber of Commerce, Embracing the Report of a Special Study of the Connecticut Tax System*, by Fred Rogers Fairchild, New Haven, 1917, pp. 67, tables). In 1913, as a result of the findings of a special commission appointed in accordance with an act of the legislature of 1911, there had been an overhauling of the corporation tax system of the state. At that time Connecticut adopted a gross earnings tax upon certain public service corporations, telephone, telegraph, express and car companies) and in 1915 the tax was extended to the remaining public service corporations, i.e., railroads and street railways, and to the public utility corporations (gas, electric, and water companies). The public service corporations are taxed upon their gross earnings at rates varying from 2 to 4.5 per cent, with either exemption from local taxation or a deduction from the earnings tax of all such local taxes. The public utility companies pay 1.5 per cent on gross earnings in addition to local taxation of all their property.

The state also taxes the net income of miscellaneous corporations, at the rate of 2 per cent. For this tax the federal income tax machinery is used, Connecticut's law requiring every such corporation to return to the tax commissioner a copy of the return made to the commissioner of internal revenue. In 1916 this tax yielded approximately \$1,600,000 and the administrative expense and effort on the part of the state were exceedingly small.

In addition to the taxes on corporate incomes, the state receives a large revenue from taxes on banking and insurance companies, from the inheritance tax, automobile tax, and the four-mill tax on bonds, notes, mortgages, and certain other forms of intangible personalty. There is also a "state tax" which is apportioned among the towns on the basis of the amount of tax revenue raised in each town. Local revenue comes mainly from the general property tax.

Although the last few years had seen decided improvements in the tax system, there was still in some quarters considerable dissatisfaction and this feeling led to the appointment by the governor, in 1915,

of a special commission to investigate the problems of state revenue and report at the 1917 legislative session. The members of the commission were ex-Governor Simeon E. Baldwin, Mr. F. H. Stadtmueller, a dairy farmer who has frequently served the state in public ways, and Mr. Guy P. Miller, an influential manufacturer.

Interest in tax matters had been so great that in the spring of 1916 the business men, under the leadership of the Connecticut Chamber of Commerce, determined to organize and carry on an independent investigation. A committee was formed, which was later enlarged to include representatives of various interests, such as the insurance companies, the manufacturers, the banking interests, railroads, telephone companies, gas and electric companies, and the grange. Professor Fred R. Fairchild, of Yale University, was employed to conduct the work, with Professor Henry F. Walradt, of Ohio State University, as his assistant. Professor Walradt obtained a half-year's leave of absence from his college position in order to give his entire time to the investigation.

The purpose of the business men's inquiry was to look over the whole tax situation, find where taxpaying ability was, discover to what extent the present system was succeeding in placing the burden of taxation equitably, and to accumulate a body of facts and conclusions which might serve as a basis for recommendations to the state commission or to the legislature. The work was not undertaken in a spirit of opposition to that of the governor's commission. The business men felt, however, that independent experts, less hampered by lack of funds than the legislative commission, might be able to study the problem in a more intensive way and perhaps furnish data which would help the commission in its work for the legislature.

The report of the state commission, issued in February, is a volume of 44 pages. It describes the tax system of the state, criticises it cautiously, and makes some recommendations of changes. The revenue of the state has more than tripled in the last eleven years, jumping from \$3,000,000 in 1905 to \$11,000,000 in 1916. It is the opinion of the commission that this revenue is unnecessarily large and it is suggested that a reduction be made by the state giving up its share of the receipts from liquor licenses, reducing the tax on the towns, and exempting from inheritance taxation bequests to charity. The commission recommends the taxation of insurance companies upon the basis of earnings, which change would also involve some

reduction in taxes. In connection with its consideration of local taxation, the commission suggests increases in the exemptions allowed in certain kinds of personal property, such as musical instruments, books and libraries, household furniture, cash on hand, and bank deposits, together with the entire exemption of watches and jewelry. In order to improve the assessment of the property tax, it is recommended that the state board of equalization be given more authority to employ expert assistance and also that the pay of local assessors be increased.

These four recommendations are the most important suggestions made by the commission. With regard to certain other defects in the Connecticut tax system, particularly the administration of the property tax and the four-mill tax on choses in action, the commission was divided in its opinion, one member, Mr. Miller, being unable to agree to the findings of the other two. He especially calls attention to the inefficient assessment of goods and materials of merchants and manufacturers and other kinds of personal property, and recommends the imposition of an income tax to take the place of the property tax on such property.

In the study of the tax system carried on for the Chamber of Commerce, a few topics were chosen for detailed investigation. The first of these is the problem of the administration of the general property tax. The report gives a mass of evidence showing conclusively that this tax does not work well. Although the taxation of real estate may possibly be considered fairly successful, the taxation of personal property is far from being effective or equitable. Detailed statistics show the inadequacy of the system. In the cases of such tangible personalty as farm animals and machinery, household furniture, libraries, musical instruments, and watches, more property escapes taxation than is taxed, while in the case of jewelry taxation is notoriously farcical.

Much intangible property escapes taxation, in spite of the four-mill tax on bonds, notes, and other such forms of wealth. Connecticut's method of taxing bonds and other choses in action has been the subject of study and commendation, but never before has there been a critical statistical investigation of its actual operation. The report of the Chamber of Commerce study gives ample evidence to warrant the conclusion that, while a considerable amount of property is reached, a great deal, probably the great majority, entirely escapes. What the report shows is the amount listed of various kinds of property, and the amount listed from each of the 168

towns of the state. Gross inequalities in the per capita assessment of the various towns are shown, the amounts ranging from zero or a few cents to over \$2,000. Such inexplicable discrepancies between the amounts listed by the towns, considered in connection with the character of their population, are practically uncontrovertible evidence as to the inefficiency of a tax of this sort.

Two other detailed statistical studies were undertaken, one being an investigation of the relative tax burden borne by the public service and public utility corporations, and the other pertaining to the property tax assessment of corporations, particularly the goods and materials of merchants and manufacturers. In connection with this latter topic there was disclosed an enormous amount of inaccuracy in the listing of property and the preparation of tax returns—so much, in fact, as to forbid any clean-cut statistical conclusions being drawn from the data collected. With regard to the taxation of public service and public utility corporations, the report states that the taxes imposed by the state are in the main equitable and that such inequalities as exist are usually found to be due to local property taxes.

Early in the legislative session there appeared among the leaders a disposition to discourage anything in the way of important changes in the existing tax system. Moreover, during the latter part of the session the attention of the legislature was mainly occupied with problems growing out of the war. As a result, no important tax legislation was adopted. The careful scrutiny to which the state tax system has been subjected has, however, not been in vain. Future discussion is sure to arise and the work done this year has put the public in possession of valuable information and will serve as a starting point for further study and legislative action.

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The United States Tariff Commission under date of April 16, 1917, made a report on *Interim Legislation* (Washington, pp. 38). Though brief, this report has valuable suggestions for students of American finance.

Hearings and briefs before the Committee on Finance of the United States Senate on *Revenue to Defray War Expenses* (Washington, 65 Cong., 1 Sess., pp. 621) dealing with H. R. 4280 have been printed for the use of the Committee on Finance. The subject-matter is classified under the following headings: war income tax; war excess

profits; war tax on beverages; war tax on cigars and tobacco; public utilities, advertising, and insurance; war tax on manufactures; war tax on admission and dues; war stamp taxes; postal rates; and war customs duties.

The Committee on Finance had previously had prepared for its use the hearings and briefs on *Revenue for Increased Army and Navy Appropriations* dealing with H. R. 20573 (Washington, 64 Cong., 2 Sess., 1917, pp. 203).

The National Bank of Commerce, New York, has circulated a pamphlet under the title, *A Constructive Criticism of the United States War Tax Bill* (June, 1917, pp. 22). The criticism is more particularly directed against the House bill.

The Mechanics & Metals National Bank discusses in a pamphlet *Applying Our Wealth to War* the resources that the United States may apply to the present world conflict (20 Nassau St., New York, 1917, pp. 20). This bank has also made a reprint of *The War Loan Act as Approved April 24, 1917* (pp. 11).

The American Exchange National Bank, of New York, has also issued a reprint of the federal tax law of April 24, 1917, authorizing the issue of bonds, *United States War Bond Issue* (pp. 14).

Robinson & Co. summarizes the historical experience of the United States in regard to *War Loans of the United States* (20 Exchange Place, New York, pp. 41).

In the series of Columbia War Papers, Professor Seligman has made a further contribution to that noticed in the last issue of the REVIEW, a pamphlet on *The House Revenue Bill, a Constructive Criticism* (Series 1, no. 16, pp. 22).

The *Proceedings of the Sixth State Conference on Taxation* held at Battle Creek, Michigan, February 1-2, 1917 (George Lord, secretary of the Michigan State Tax Association, pp. 118) contains papers on: "Taxation of mortgages and bonds," by O. B. Fuller, of Lansing (pp. 16-27); "Michigan laws governing assessments," by Arthur B. Williams, of Battle Creek (pp. 55-72); and "Equipment assessments," by Thomas D. Kearney, of Ann Arbor (pp. 72-82).

The office of the state comptroller of New York (Albany) has begun the publication of a monthly bulletin on *State Finances*, the first number appearing in April of this year. Each issue contains about 15 pages.

The Tax Commission of Ohio has codified and revised the *Tax Laws of Ohio* relating to the assessment of real and personal property (Columbus, 1917, pp. 75).

There has been recently published by the tax commissioner of Connecticut the *Quadrennial Report of Indebtedness and Expenditure of Municipalities* (Hartford, 1917, pp. 141).

The State Tax Board of Virginia, in its Circular No. 7, makes a *Digest of Opinions on Tax Questions Rendered by the State Tax Board from June 1, 1916 to April 20, 1917*.

The *Report of the Tax Commissioner of Massachusetts* for the year ending November 30, 1916 (Boston, 1917, pp. 156) devotes some eighteen pages to the subject of corporation taxation. Special topics considered are taxation of life insurance companies, equalization of assessments of real estate, and taxation of legacies and successions, and stock transfer tax.

The *Fifth Biennial Report of the Minnesota Tax Commission* (Minneapolis, 1916, pp. xv, 399) has a chapter on "The taxation of land values" (pp. 84-122); and chapter 10 deals with "The comparative cost of state government," an investigation conducted by Professor Blakey of the University of Minnesota.

The Guaranty Trust Company of New York has for circulation a pamphlet on the *New York State Franchise Tax on Manufacturing and Mercantile Corporations* (pp. 33) and also a reprint of *The Investment Tax Law and the Mortgage Tax Law* of the state of New York as amended in 1917 (New York, 140 Broadway, pp. 61).

Demography

The federal Bureau of the Census has published *Mortality Statistics, 1915. Sixteenth Annual Report* (Washington, 1917, pp. 707).

Charles F. Gettemy, director of the Bureau of Statistics of Massachusetts, announces that preliminary bulletins will be issued in the near future in regard to the Massachusetts state census of 1915. A typewritten bulletin issued under date of March 7, 1917, deals with the population of the commonwealth as classified by native and foreign born.

A *Preliminary Report* has been made by a Committee concerning Causes of Death and Invalidity in the Commonwealth of Australia (Melbourne, 1916, pp. 6).

In Bulletin No. 207, *Causes of Death by Occupation*, by Louis I. Dublin, the federal Bureau of Labor Statistics publishes the occupational mortality experience of the Metropolitan Life Insurance Company, industrial department, 1911-1913 (pp. 88).

Insurance

WORKMEN'S COMPENSATION IN NEW JERSEY. By an act approved March 27, 1917, New Jersey has followed the lead of New York, Pennsylvania, and other important industrial states in establishing a state rating bureau for workmen's compensation insurance. Some of the most interesting actuarial and statistical problems in the whole field of insurance have developed in connection with the application of workmen's compensation laws, and the state rating bureau seems likely to become an important part of the machinery for the adjustment and control of compensation insurance rates.

Under the former New Jersey law insurance for the compensation risk was left optional with the employer. This was not altogether satisfactory even from the employer's standpoint. Of two competing employers, one might carry insurance and the other not. And the laborer in many instances was left without any certainty that the payments, with recourse for the amount thereof against his insurance company on the part of an employer might leave the injured workman without recourse.

The new law therefore provides for compulsory insurance, which may be provided under the form of so-called "self insurance," or may be placed with an authorized stock or mutual company. In order to come under the "self insurance" provision, which is merely the carrying of his own risk, the employer must satisfy the commissioner of banking and insurance of the permanence and financial standing of his business. If the insurance is carried by a stock or mutual company the employer is nevertheless left primarily liable for compensation payments, with recourse for the amount thereof against his insurance carrier. But the carrier is directly liable to the injured employee in case of the death, insolvency, bankruptcy, etc., of the employer.

The law further provides for the filing with the commissioner of all classifications, rules, rates, and systems of merit rating, none of which shall be effective until approved, by the commissioner of banking and insurance, on the score both of *reasonableness* and *adequacy*. The commissioner is also authorized to "create, organize, and supervise" a "state compensation rating and inspection bureau." A special deputy, appointed by the commissioner, is to preside over this bureau as chair-

man. All compensation insurance carriers are to be members of the bureau, and no insurance can be written except in accordance with the rules and rates determined by the bureau and approved by the commissioner. The expenses of the bureau are to be defrayed by the insurance carriers. All officers, members of committees, and employees of the bureau are subject to the approval of the commissioner. The commissioner is also authorized to employ an actuary and necessary assistants, to fix their compensation, and to call for such reports and information as may be necessary for the determination of the cost of rates. The act does not apply to employers of farm laborers or domestic servants.

It is obvious that this law gives large powers of control over compensation insurance to the insurance commissioner. In Pennsylvania the manager of the rating bureau is the appointee of the insurance carriers. Under the New Jersey law he is a special deputy of the insurance department. It remains to be seen whether the larger powers of control in New Jersey over the process of rate making will be consistent with a smoothly working bureau. Compensation insurance carriers have pretty fully accepted the principle of coöperative rate making, and also the principle of approval of rates by the insurance commission. This spirit of coöperation was abundantly manifested in the national conference on compensation insurance rates held in New York in January, February, and March last, and if in New Jersey the somewhat unusual powers of control over rate making possessed by the commissioner are exercised with restraint, the chances are that the coöperation which has proved to be so necessary in the making of compensation insurance rates will be forthcoming on the part of the carriers.

The commissioner has made an excellent beginning in the selection of Mr. W. W. Greene as special deputy and chairman. Mr. Green has had valuable experience with the New York Workmen's Compensation Commission and with the Colorado Industrial Commission, and is an actuary and statistician of recognized standing.

WALTER M. ADRIANCE.

Princeton University.

The federal Bureau of Labor Statistics has made an exhaustive compilation of *Workmen's Compensation Laws of the United States and Foreign Countries* (Washington, Jan., 1917, No. 203, pp. 961). This report is presented in three parts. The first reviews the workmen's compensation commissions of the various states; the second summarizes the principal features of the workmen's compensation laws

of forty-six foreign countries; and the third is the text of the workmen's compensation laws of the various states and the federal statute.

The National Industrial Conference Board has issued a pamphlet on the *Workmen's Compensation Acts in the United States: Legal Phase* (15 Beacon St., Boston, Apr., 1917, pp. 62). The preface states that it is intended in later reports to discuss the operation of these acts from the medical, economic, and administrative standpoints. Headings of the various chapters in this particular report are: 1, The adoption and growth of the compensation principle; 2, The form and validity of state legislation; 3, The persons to whom compensation applies; 4, The notice of injury; 5, The assurance of systematic relief; 6, Accident and disease; 7, "Misconduct" by employer and employee; 8, The exclusiveness of compensation; 9, The administration of compensation acts; 10, Conclusions and suggestions.

The Nevada Industrial Commission presents a *Brief* showing the effect of 1917 amendments to the Nevada industrial insurance act of 1913 (Carson City, 1917, pp. 8).

An Act creating the Industrial Commission of Utah providing for Workmen's Compensation and for other purposes has been printed as a separate (Salt Lake City, pp. 39).

The Metropolitan Life Insurance Company has for circulation the following pamphlets: *General Population and Insurance Mortality Compared*, a discussion of the mortality experience of the Metropolitan Life Insurance Company, Industrial Department, and of the general population, 1915, prepared by George H. Van Buren (pp. 7); *The Application of the Statistical Method to Public Health Research*, by Louis I. Dublin, reprinted from the "American Journal of Public Health" (p. 14); and *The Vital Statistics of Old Age*, by Louis I. Dublin, reprinted from the "New York Medical Journal" of May 19, 1917 (pp. 6).

The Insurance Society of New York has printed *The Evolution of Employers' Liability Insurance*, an address delivered before the society by Mr. Edmund Dwight (New York, 1917, pp. 11).

The Organization and Management of a Farmers' Mutual Fire Insurance Company is described by V. N. Valgren in Bulletin No. 530 of the United States Department of Agriculture (Washington, May 8, 1917, pp. 34).

The special commission appointed by Governor Johnson of Califor-

nia to investigate social insurance has made its *Report* under date of January 25, 1917 (Sacramento, pp. 340). Several chapters deal with: The findings of the commission; The California survey; Health insurance in fourteen countries; Social results of social insurance; Existing facilities for insurance of wage-workers in the United States; Social insurance movement in the United States; and Estimates of cost.

A Report of the Special Commission on Social Insurance in Massachusetts also appeared early this year (Boston, Feb., 1917, House Doc. 1850, pp. 311).

A report on *Social Insurance with Special Reference to Compulsory Health Insurance*, made by Dr. John Franklin Crowell for the Chamber of Commerce of the State of New York, is published as a supplement to the *Monthly Bulletin* (65 Liberty St., New York, pp. 92).

The subject of *Compulsory Health Insurance* is also discussed by Magnus W. Alexander in a pamphlet representing in substance the material presented in hearings before the legislature of New York on March 7, and of Massachusetts on March 13, 1917 (Magnus W. Alexander, West Lynn, Mass., pp. 15).

Mr. John T. Stone, president of the Maryland Casualty Company, contributes to the further discussion of this subject in *Problems Concerning the Accident and Health Insurance Business*, an address published by the Insurance Society of New York (pp. 14).

PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Theory

(Abstracts by W. M. Adriance)

COYAJEE, J. C. *An Indian Kammeralist*. Bengal Econ. Journ., Jan., 1917. Pp. 16.

A study of the economic views of the Indian writer Kantilya. This early thinker shows very striking parallels in doctrine with the European cameralists, and in some particulars considerably surpasses them.

GUYOT, Y. *La doctrine de l'utile*. Journ. des Econ., Apr. 15, 1917. Pp. 17.

LECARPENTIER, G. *La doctrine économique du Professeur A. Wagner*. Rev. Sci. Pol., Dec. 15, 1916. Pp. 25.

An extended review of Wagner's economic system. The occasion of the review is the publication, or rather the completion, of a five volume translation of Wagner under the title *Fondements de l'Economie Politique*. The review concerns itself largely with making clear the middle ground taken by Wagner and the socialists of the chair between doctrinaire individualism on the one hand and doctrinaire socialism on the other.

SCHELLE, G. *L'oeuvre de Paul Leroy-Beaulieu*. Journ. des Econ., Apr. 15, 1917. Pp. 17.

A sympathetic review of the half century of work of the eminent French economist.

Economic History, United States

(Abstracts by E. L. Bogart)

BARNARD, B. W. *The private coinage of gold tokens in the South and West*. S. Atlantic Quart., Apr., 1917. Pp. 8.

Covers the period 1830 to 1851.

BEALL, T. P. *Pioneer reminiscences*. Wash. Hist. Quart., Apr., 1917. Pp. 8. Author took part in the mine rushes, 1857-1865.

BELL, H. C. *The West-India trade before the Revolution*. Mag. of Hist., Nov.-Dec., 1916. Pp. 9.

BUTLER, A. W. *Notes concerning Brookville one hundred years ago*. Ind. Mag. of Hist., June, 1917. Pp. 11.

CHRISTIAN, A. K. *The tariff history of the Republic of Texas*. S. W. Hist. Quart., Apr., 1917. Pp. 26.

Covers the decade 1835-1845. First instalment.

COTTERILL, R. S. *The telegraph in the South, 1845-1850*. S. Atlantic Quart., Apr., 1917. Pp. 6.

FISH, C. R. *The northern railroads, April, 1861*. Am. Hist. Rev., July, 1917. Pp. 16.

GARDNER, H. *Coöperation among the Mormons*. Quart. Journ. Econ., May, 1917. Pp. 39.

Traces an informal coöperation from 1847 to 1868; coöperative stores from 1868 to 1890; and coöperative industrial enterprises since 1890.

JEFFERSON, M. *Our trade in the great war*. Geog. Rev., June, 1917. Pp. 7.

Covers the period 1911 to 1916.

KING, I. F. *Flat boating on the Ohio River*. Ohio Arch. & Hist. Quart., Jan., 1917.

KING, R. S. *Silver mines of Ohio Indians*. Ohio Arch. & Hist. Quart., Jan., 1917.

LAPRADE, W. T. *A new epoch*. S. Atlantic Quart., Apr., 1917. Pp. 10.

Present political and economic changes mean the passing of an old and the ushering in of a new epoch.

MECKLIN, J. M. *The development of the slave status in American democracy*. Journ. of Negro Hist., Apr., 1917. Pp. 21.

The first part of a thoughtful study, covering the colonial period.

MILLS, W. C. *Explorations of the Westenhaver mound*. Ohio Arch. & Hist. Quart., Apr., 1917. Pp. 41.

NELSON, N. C. *Kentucky and her cave men*. Am. Museum Journ., Apr., 1917. Pp. 15.

An inquiry into the aboriginal inhabitants of this state.

NETZ, J. *The great Los Angeles real estate boom of 1887*. Ann. Pub. of Hist. Soc. of Southern California, 1916.

PARKER, A. C. *Problems of race assimilation in America, with special reference to the American Indians*. Am. Indian Mag., Oct.-Dec., 1916.

PROVINE, W. A. *Lardner Clark, Nashville's first merchant and foremost citizen*. Tenn. Hist. Mag., Mar., 1917. Pp. 23.

An account of trade in Tennessee at the end of the eighteenth century. First instalment.

RAMSDELL, C. W. *The Confederate government and the railroads*. Am. Hist. Rev., July, 1917. Pp. 17.

RAMSDELL, C. W. *Internal improvement projects in Texas in the fifties*. Miss. Valley Hist. Rev., Apr., 1917. Pp. 11.

Describes the building of land grant railroads by private corporations. The plan to grant state credit was rejected.

ROBERTSON, J. R. *Sectionalism in Kentucky from 1855 to 1865*. Miss. Valley Hist. Rev., June, 1917. Pp. 15.

ROSEBOOM, E. H. *Ohio in the presidential election of 1824*. Ohio Arch. & Hist. Quart., Apr., 1917. Pp. 73.

Contains much of economic interest.

SHEPARD, C. L. *The Connecticut Land Company: a study in the beginnings of colonization of the Western Reserve*. W. Reserve Hist. Soc., Tract No. 96 (1916).

STOUSSAT, ST.G. L. *Memphis as a gateway to the West: a study in the beginnings of railway transportation in the old Southwest.* Tenn. Hist. Mag., Mar., 1917. Pp. 27.

TEAKLE, T. *History and constitution of the Icarian community.* Iowa Journ. of Hist. & Pol., Apr., 1917. Pp. 73.

A translation of Etienne Cabet's book on this subject.

THOMPSON, W. M. *When Washington toured New England (1789).* Mag. of Hist., Nov.-Dec., 1916. Pp. 8.

Second paper.

THORSTEINSON, E. *The Doukhobors in Canada.* Miss. Valley Hist. Rev., June, 1917. Pp. 46.

The presence of this sect has given rise to some perplexing immigration problems.

The beginning of cotton cultivation in Georgia. Ga. Hist. Quart., Mar., 1917.

Reprints of early newspaper articles.

The future of industry. Unpopular Rev., Apr.-June, 1917. Pp. 22.

An analysis of industrial organization and of its possible future.

Pioneer trails across Iowa. Journ. of Hist., Jan., 1917.

Economic History, Foreign

(Abstracts by Clive Day)

BELL, H. *L'industrie britannique après la guerre.* Journ. des Econ., Apr., 1917. Pp. 22.

Translation of a paper presented to the Scottish Economic Society by Sir Hugh Bell.

BROWN, A. E. *The economic conditions of the cotton weavers of the Bankura district.* Bengal Econ. Journ., Jan., 1917. Pp. 6.

EINAUDI, L. *Cesare Jarach.* Rif. Soc., Jan.-Feb., 1917. Pp. 4.

Obituary of one of the most promising of younger Italian economists, killed in the war.

G. M. *Cesare Jarach.* Giorn. d. Econ., Jan., 1917. Pp. 2.

GERSON, A. J. *Limitations of guild monopoly.* Am. Hist. Rev., Apr., 1917. Pp. 3.

Shows numerous exceptions to guild monopoly in London.

GIRZIOTTI-KRETSCHMANN, J. *La Russia e la sua politica commerciale dopo la guerra.* Rif. Soc., Mar.-Apr., 1917. Pp. 9.

GUYOT, Y. *La politique économique britannique actuelle.* Journ. des Econ., Mar. 15, 1917. Pp. 26.

Descriptive and critical.

HEYKING, B. A. *The economic resources of Russia, with special reference to British opportunities.* Journ. Royal Stat. Soc., Mar., 1917. Pp. 25.

A useful statistical survey, with bibliographical information, by the consul-general for Russia in the United Kingdom.

- LIPSON, E. *The black death*. Econ. Journ., Mar., 1917. Pp. 8.
A review of Miss Levett's monograph in the Oxford studies.
- MANX, H. *The economics of a Deccan village*. Indian Journ. Econ., Dec., 1916. Pp. 25.
- MICHELS, R. *Alberto Caroncini*. Rif. Soc., Jan.-Feb., 1917. Pp. 7.
Obituary of a young economist dead in the war.
- MUKERJI, K. *The transferability of occupancy holdings in Bengal*. Bengal Econ. Journ., Jan., 1917. Pp. 20.
Part I of a study in the history of Indian land tenure.
- PRATO, G. *Forze economiche e forze morali nella restaurazione post-bellica*. Rif. Soc., Nov.-Dec., 1917. Pp. 24.
- RAFFALOVICH, A. *Effects of the war on economic life of Russia*. Econ. Journ., Mar., 1917. Pp. 7.
- ROTA, R. *Libertà di commercio interno e di lavoro negli economisti piemontesi nel secolo XVIII*. Giorn. d. Econ., Mar., 1917. Pp. 18.
- ST. ILITCH, M. *The industries of Serbia*. Econ. Journ., Mar., 1917. Pp. 6.
- TOWER, W. S. *South America and the war*. Journ. Pol. Econ., May, 1917. Pp. 11.
- WELLS, B. W. *Banking in old Athens*. Sewanee Rev., Apr., 1917. Pp. 19.
Descriptive sketch based on Demosthenes.
Les répercussions économiques de la guerre en Hollande. Monde Econ., Mar. 10, 1917. Pp. 2.

Agricultural Economics

(Abstracts by John Lee Coulter)

- BATTISON, W. J. *Annual wool review for 1916*. Bull. Nat. Assoc. Wool Mfrs., Jan., 1917. Pp. 61.
A compilation of statistical records for 28 consecutive years comprising production, consumption, exports and imports. Wool and mutton are considered with chart of fluctuating wool prices.
- BOYLE, J. E. *Notes from an agricultural field trip across North Dakota*. Quart. Journ. Univ. N. Dak., Jan., 1917.
A statement of economic and social conditions as observed in traveling across North Dakota.
- BULKLEY, R. J. *The federal farm loan act*. Journ. Pol. Econ., Feb., 1917. Pp. 19.
A statement of facts leading to The Federal Farm Loan act with a description of the system.
- BUTTERFIELD, K. L. *The relationship of New England agriculture to manufacturing*. Printed by the National Association of Cotton Manufacturers (Boston), April, 1916. Pp. 10.
A discussion of the general relation of agriculture to manufacturing with application to New England conditions. Methods of solving some of the problems are suggested.

CARVER, T. N. *Standardization of marketing*. Quart. Journ. Econ., Feb., 1917. Pp. 4.

An argument in favor of fixing standards of quality and quantity whenever possible.

CURTLE, W. H. R. *Enquiry into the rate of wages per acre in England, 1913-1914*. Intern. Rev. Agri. Econ., Aug., 1916.

A study of the wages per acre on 450 farms of different types and sizes in several counties.

CURTLE, W. H. R. *Enquiry into the rate of wages per acre in England, 1913-1914*. Intern. Rev. Agri. Econ., Oct., 1916. Pp. 14.

A statement of the status of female labor, a discussion of the economy of high and low wages and tables showing the relation of yields and types of farms to wages.

FAY, C. R. *German and British agriculture*. Econ. Journ., Dec., 1916. Pp. 4.

A very good report contrasting German and English agriculture. The author shows why German agriculture is superior to that of English.

FRIEDMANN, G. *Sul frazionamento dei terreni e l'intensificazione della cultura*. Rif. Soc., Aug.-Sept.-Oct., 1916. Pp. 13.

An interesting experiment in the cultivation of small holdings in Modena.

GARINO-CANINA, A. *Lineamenti della politica granaria moderna*. Rif. Soc., Aug.-Sept.-Oct., 1916. Pp. 28.

A study of the various ways in which modern states control the grain industry.

GILLETTE, J. M. *Mitigating rural isolation*. Quart. Journ. Univ. N. Dak., Jan., 1917. Pp. 13.

A comprehensive discussion of rural isolation with suggestions for improving conditions.

JENKINS, J. E. *Land settlement in Australia*. Intern. Rev. Agri. Econ., July, 1916. Pp. 8.

A comprehensive statement of the general system of land settlement in Victoria, Australia.

JOHNSON, O. R. and FOARD, W. E. *Size of farm business*. Missouri Sta. Bul. 140, April, 1916. Pp. 40.

A popular bulletin based upon more than 700 farm survey records, showing the influence of size of farm business upon efficiency and profits. Illustrated.

KAARSEN, A. C. *Ententens Ernæringsproblemer*. Nat. ök. Tids., Nov.-Dec., 1916. Pp. 31.

Regards the food problem for the entente as serious.

KENT, W. H. *"Future" trading and the farmer*. Annalist, Feb. 26, 1917.

An argument in favor of "future" trading, attempting to show how it benefits the producer.

LUÁCES, R. L. *Proyecto de ley agraria para Cuba*. Ref. Soc. (Cuba), Aug., 1916. Pp. 10.

MARCH, A. R. *Will Germany's food supply suffice until another crop?* Econ. Wld., Dec. 30, 1916. Pp. 6.

A general discussion of the production and importations of foods and fertilizers by Germany.

PATERSON, J. W. *Land settlement and the provision of credit in western Australia*. Intern. Rev. Agri. Econ., Jan., 1917. Pp. 11.

A careful examination of the present status of agriculture, and the possibilities of development in western Australia.

PRATO, G. *I redentori delle terre incolte*. Rif. Soc., Jan.-Feb., 1917. Pp. 20.

Examination of the project to extend the area of cultivation in Italy.

PEDRO, B. *The dairy industry in Argentina and plans for its future development*. Anales de la Sociedad Rural Argentina, Mar.-Apr., 1916. Pp. 6.

The development of the dairy industry in Argentina since 1894. Statistical data are presented.

POPE, J. E. *Can the farmer realize higher prices for his crops by holding them?* Quart. Journ. Econ., Aug., 1916. Pp. 26.

A comprehensive study of the gains and losses to the farmer from storing crops. Statistical evidence is presented.

PRINGLE, J. M. *Agricultural distress in Brahmanbaria*. Bengal Econ. Journ., Sept., 1916. Pp. 11.

A general statement of the difficulties the people of Brahmanbaria have in tiding themselves over in years of famine.

ROHTLIEB, C. *Am gränsen för jordbrukets intensifiering*. Ek. Tids., No. 6, 1916. Pp. 34.

A study of the practicability of a greater degree of intensification in agriculture under existing conditions in Sweden.

VAN DINE, D. L. *The relation of malaria to crop production*. Sci. Mo., Nov., 1916. Pp. 9.

A study of the loss of time and reduced efficiency of labor caused by malaria.

VOLD, L. *Some reasons why North Dakota should adopt the uniform sales act*. Quart. Journ. Univ. N. Dak., Jan., 1917. Pp. 32.

The author points out very definitely the weak places in the present code of North Dakota, the benefits to be derived from the adoption of the uniform sales act, and answers the objections to its adoption.

WOHLIN, N. *Am den osunda jordspekulationen och atgärdu för dess begänsung*. Ek. Tids., No. 4, 1916. Pp. 22.

Favors legislation to restrict speculation in land to prevent waste and to keep the ownership of land to a greater extent in the hands of its tillers.

WACHA, D. E. *Agricultural banks in India*. Indian Journ. Econ., Jan., 1916. Pp. 37.

A discussion of the present status of the ryot of India, the failure of private banks and coöperative credit societies, and a suggestive general plan for agricultural banks.

The Agrarian question in Bosnia and Herzegovina. Intern. Rev. Agri. Econ., Oct., 1916. Pp. 14.

A detailed study of land tenure in Bosnia and Herzegovina during the last half of century.

Discussion as to the method of effecting valuation. Il Monitore Tecnico, Milan. XXIIInd Year, No. 7, March 10, 20, 1916. Pp. 5.

A examination of the fundamental principles of the analytic method in valuation.

The German agricultural coöperative societies in 1915. Intern. Rev. of Agri. Econ., Oct., 1916. Pp. 8.

The development of coöperative societies, and the work of the National Federation of German Agricultural Coöperative Societies during the year 1915. The figures presented are incomplete.

Coöperation in agriculture in 1914. Intern. Rev. Agri. Econ., Sept., 1916.

Statistical data are presented showing the status of the agricultural coöperative societies in the United Kingdom and their growth since 1904.

The coöperative sales of live stock in Germany. Intern. Rev. Agri. Econ., Dec., 1916. Pp. 10.

A brief discussion of the development of coöperative societies for the selling of livestock.

The organization of the working of boys' and girls' agricultural clubs in the United States. Intern. Rev. Agri. Econ., Nov., 1916. Pp. 12.

A general statement of the purpose, organization and development, and methods of conducting boys' and girls' agricultural clubs.

The work of the Jewish agricultural and industrial aid society. Intern. Rev. Agri. Econ., Sept., 1916. Pp. 14.

A brief account of the origin, development, purposes and achievements of the Jewish agricultural and industrial aid society up to December, 1915.

Facts about farm mortgage debt. Journ. Am. Bankers Assoc., Dec., 1916.

Extracts from the annual address of President F. W. Thompson to the convention of the Farm Mortgage Bankers Association. President Thompson undertook to prove that the motive of rural credit legislation was largely political and not generally needed.

Commerce

(Abstracts by H. R. Tosdal)

ANDERSON, B. M. *The existing machinery of the grain trade and the food census.* Econ. Wld., June 9, 1917.

Develops proposition to ascertain by board of experts the available supplies of grain and the probable extent of demand for purposes of price regulation by government.

BARETTI, G. *Alcune considerazioni sul credito marittimo.* Riv. di Sci. Bancaria, Oct.-Dec., 1916. Pp. 8.

BENEDICT, W. *The Pacific Mail.* Forum, Nov., 1916. Pp. 20.

Historical sketch of rise and development of the Pacific Mail S. S. Co., which gives little attention to government shipping subsidies received.

BERGLUND, A. *The war and trans-Pacific shipping.* Am. Econ. Rev., Sept., 1917. Pp. 15.

BORGATTA, G. *I "cicli degli affari."* Rif. Soc., Jan.-Feb., 1917. Pp. 13.

An examination of the recent literature on business cycles.

DAVIDSON, J. M. *German trade expansion: its methods and its tendencies.* (Concluded.) Journ. Inst. Bankers, Mar., 1917.

Concluding instalment deals with German methods of fostering export trade by preferential railway rates, export bounties, subsidies and the like.

GOEMANN, W. P. *Coöperative selling vs. the middleman in the upbuilding of our foreign commerce.* Econ. Wld., Apr. 21, 1917. Pp. 5.

Argues that present system of distribution through middleman is more effective in developing export trade than proposed coöperative combinations of manufacturers favored by the Federal Trade Commission in a recent report.

GOOD, E. T. *The future of British shipping.* Finan. Rev. Rev., Mar., 1917.

Writer thinks British shipping supremacy is threatened by current revival of American shipping unless there is "active coöperation between labor and capital and the State."

LAWRENCE, J. S. *The international trade of the United States in textiles.* Econ. Wld., Apr. 14, 1917. Pp. 3.

Parts of an address emphasizing foreign trade opportunities for American textiles and giving basic principles for their development.

PAWLOWSKI, A. *L'industrie minière en France pendant les deux premières années de la guerre.* Journ. des Econ., Mar. 15, 1917.

An illuminating study of the decline in the French production of coal, iron, and other minerals. War conditions, scarcity of labor, and lack of transportation facilities are analyzed as causes.

PORRI, V. *Esiste ancora il commercio internazionale durante la guerra?* Rif. Soc., Jan.-Feb., 1917. Pp. 15.

VUOLI, R. *L'intervento degli enti pubblici nella delimitazione dei prezzi dei generi di prima necessità.* Riv. Intern., Dec., 1916. Pp. 34.

Continuation of a study of the modes of food control established in Italy for war purposes.

The coöperative sale of wool. Intern. Rev. Agri. Econ., Feb., 1917.

A rather detailed account of the methods and results of the coöperative sale of wool by Canadian growers, with particulars as to aid rendered by government. Though still limited in application, the plan is said to have proved successful.

The future of foreign trade. New Statesman, May 26, 1917.

Writer perceives the coming in the post-war reconstruction of a fundamental change in the methods and organization of foreign trade whereby haphazard exporting by individual traders will give way to an organized system of "reciprocal imports."

The wool industry—its commercial problems. Bull. Nat. Assoc. Wool. Mfrs., Apr., 1917. Pp. 10.

An extended and favorable review of Mr. Cherington's recent book on the wool industry by the secretary of the National Association of Wool Manufacturers.

Public Utilities

(Abstracts by Ralph E. Heilman)

CONWAY, T. *Up-state New York lines need financial relief.* Elec. Ry. Journ., June 9, 1917.

Asserts that the companies must curtail quantity and lessen quality of service, or secure a higher rate of fare, if they are to avoid financial disaster.

DOOLITTLE, F. W. *The economic aspects of franchises.* Journ. Eng. Club of St. Louis, Mar.-Apr., 1917.

Characterizes the following four periods in the development of utility franchises: (1) general misunderstanding as to facts; (2) general misunderstanding as to motives; (3) attempted arbitration by governmental agencies; (4) a correct understanding of mutual interests involved.

HUNTER, M. H. *The early regulation of public service corporations.* Am. Econ. Rev., Sept., 1917. Pp. 13.

KING, C. L. *National issues in local street railway franchises.* Pro. Am. Elec. Ry. Accountant's Assoc., 1916.

The larger issues at stake in the granting of local franchises.

LAVINE, A. L. *Public regulation v. public operation: some legal aspects.* Case & Comment, Mar., 1917.

The effort in regulating utilities should be to direct the current of human endeavor, not to thwart it.

LEE, I. L. *Interborough solicits complaints.* Elec. Ry. Journ., Apr. 7, 1917.

Describes the attempt of the Interborough Rapid Transit Company to adjust complaints and to secure the coöperation of the public.

NASH, L. R. *Principles of public utility financing.* Stone & Webster Journ., May, 1917.

The various types of public utility securities, the conditions under which each may be issued, the distribution of securities, etc.

WILSON, T. *Fort Wayne municipal plant.* Power, Apr. 24, 1917.

Asserts that this municipal plant has saved consumers more than double their investment in seven years.

Analyses of P. R. T. proposal. Elec. Ry. Journ., Apr. 7, 1917.

A criticism of the Philadelphia Rapid Transit Company's plan for the lease and operation of the new city-built high-speed lines.

Chicago traffic, value and finances. Elec. Ry. Journ., Apr. 14, 1917.

Describes the methods used by the Parsons Commission in checking travel, the cost and value of the elevated lines, and gives a summary of the financial plan for the proposed unified traction system.

Cincinnati's rapid-transit ordinance. Elec. Ry. Journ., Apr. 7, 1917.

A description of the plan for unified electric railway operation, voted on by the citizens of Cincinnati, on April 17th.

Los Angeles hydro-electric power plant. Munic. Journ., Mar. 1, 1917.

First utilization of municipal plants for utilizing fall in aqueduct.

Putting across the skip stop in Baltimore. Elec. Ry. Journ., June 2, 1917.

How the United Railways of Baltimore has convinced its patrons of the desirability and the time saving features of the skip stop.

Springfield company wants 6-cent fare. Elec. Ry. Journ., June 2, 1917.

Springfield (Mass.) street railway contends that it must be permitted to charge a six-cent fare, on account of increasing costs.

Railways and Transportation

(Abstracts by Julius H. Parmelee)

ACWORTH, W. M. *English railways under war conditions.* Outlook, May 16, 1917. Pp. 2.

Draws two conclusions from English experience: If American roads are taken over by government for war purposes, they should (1) be operated under present management, and (2) be guaranteed the normal rate of return on their property.

ADLER, W. *The legs of an army.* Outlook, Apr. 18, 1917. Pp. 3.

Function of American railways in time of war.

ALLIX, G. *Les résultats de 1916.* Journ. des Trans., Apr. 8, 1917. Pp. 5.

ARRAGON, A. V. *Railroad coördination.* Journ. Pol. Econ., June, 1917. Pp. 19.

Plan to strengthen railroad credit through systematic correlation of railways under government supervision.

BELNAP, H. W. *The safety appliance standards, their purpose and the reasons underlying their fixed and definite location.* Pro. St. Louis Ry. Club, May 11, 1917. Pp. 17.

BROWN, A. C. *New ocean terminals at Halifax.* Ry. Rev., May 26, June 9, 1917. Pp. 5, 6.

Illustrated with photographs and diagrams.

BUNN, C. W. *Federal incorporation of railway companies.* Harvard Law Rev., Apr., 1917, Pp. 6.

Holds that Congress has large powers in matter of railway incorporation.

CARMAN, E. C. *How to avoid government ownership of the railroads.* Journ. Pol. Econ., Apr., 1917. Pp. 11.

CHEATHAM, B. F. *The military aspect of railway preparedness*. Pro. Pacific Ry. Club, Apr., 1917. Pp. 8.

DIXON, F. H. *How to study a railroad report*. R. M. I. S. Journ., Apr.-May, 1917. Pp. 2.

HULL, H. *Discrimination under the act to regulate commerce*. Am. Law Rev., Mar.-Apr., 1917. Pp. 21.

HUNGERFORD, E. *Whose freight shall have the right of way?* Nation's Business, July, 1917. Pp. 6.

The priority problem in war time.

JACKMAN, W. T. *Canada's railroad problem*. Monetary Times, Apr. 27, May 4, 11, 1917. Pp. 21.

Pamphlet reprint of 21 pages. Analyzes government ownership proposition for Canada.

LAVINE, A. L. *Public regulation v. public operation: some legal aspects*. Case & Comment, Mar., 1917. Pp. 6.

LORENZONI, G. *L'evoluzione nell'industria dei trasporti marittimi negli ultimi cent'anni*. Rif. Soc., Mar.-Apr., 1917. Pp. 20.

A broad survey of the principal stages of the development of shipping.

MERZ, C. *Priority in shipment*. New Republic, June 23, 1917. Pp. 3.

NOUVION, G. DE. *Les chemins de fer français en 1916*. Journ. des Econ., May 15, 1917. Pp. 21.

PARMELEE, J. H. *Operation of British railways in the war*. Ry. Age Gaz., Apr. 27, 1917. Pp. 3.

Four recent developments described: economies, 50 per cent increase in passenger rates, entry of Irish railways into war scheme, and freight-car pooling.

PAYEN, E. *Les grandes compagnies françaises de chemins de fer en 1916*. II. *Les dépenses et le produit net*. L'Econ. Franç., May 19, 1917. Pp. 2.

PAYNE, J. L. *Canadian commission against public ownership*. Ry. Age Gaz., May 4, 1917. Pp. 4.

Analysis of recent findings of special commission appointed to study Canadian railway situation.

PLUMB, G. E. *The legal basis for the valuation of railroad properties advanced by the organized employees of steam railroads*. Utilities Mag., May, 1917. Pp. 15.

Summary of brief filed before Interstate Commerce Commission on behalf of the four railway brotherhoods.

POWELL, T. R. *Due process and the Adamson law*. Columbia Law Rev., Feb., 1917. Pp. 13.

RIPLEY, W. Z. *The supreme court and the railway brotherhoods*. Am. Rev. Rev., May, 1917. Pp. 3.

Analysis of recent decision in the case of the eight-hour law.

STONE, A. J. *The operating side of a railroad.* Ry. & Locomotive Engg., June, July, 1917. Pp. 5.

SWANSON, W. W. *Report of the Royal Commission to inquire into railways and transportation in Canada.* Am. Econ. Rev., Sept., 1917. Pp. 8.

WADE, H. T. *Railway transportation in war.* Am. Rev. Rev., Mar., 1917. Pp. 3.

WATKINS, E. *Has a shipper who has been denied relief by the Interstate Commerce Commission any remedy?* Columbia Law Rev., Jan., 1917.

WILSON, H. R. *British railways in war time.* Ry. Rev., Apr. 21, May 12, June 7, 1917. Pp. 2, 3, 3.

Alaska transportation lines rindicated by order. Ry. & Marine News, July, 1917. Pp. 3.

Analysis of the so-called "Alaska investigation" report of the Interstate Commerce Commission.

Electric railways in war time. Elec. Ry. Journ., May 12, 1917. Pp. 4.

What has been done in Canada.

Government ownership in foreign countries. Ry. Age Gaz., May 18, 1917.

Outline of testimony of W. M. Acworth before Newlands joint congressional committee.

To increase transportation efficiency. Ry. Age Gaz., June 1, 1917. Pp. 4.

Shippers appoint 23 regional committees to coöperate with government and railways in securing transportation efficiency in war.

Michigan and the Pere Marquette. Pere Marquette Mag., Mar., Apr., May, June, 1917. Pp. 6, 6, 5, 3.

Brief historical sketch of Pere Marquette railway system.

"Political" railways. A lesson from Victoria. South African Railways & Harbours Mag., Mar., 1917. Pp. 2.

Progress on government railway in Alaska. Ry. Age Gaz., Apr. 20, 1917. Pp. 5.

War conditions and the electric railways. Elec. Ry. Journ., Apr. 28, 1917.

Many electric railways are "doing their bit."

Les chemins de fer de l'Asie turque. Bull. des Transports Intern. par Chemins de Fer, Mar., Apr., May, June, 1917. Pp. 10, 5, 6, 10.

La crise des transports en Allemagne. Journ. des Trans., Mar. 24, 1917.

Chiefly devoted to the problem of car shortage.

Accounting

(Abstracts by Martin J. Shugrue)

BECK, H. *Theory and practice.* Journ. Account., July, 1917. Pp. 7.

Considers the proper treatment of discount on securities sold and cash repair funds from both the theoretical and practical points of view.

CHAPMAN, R. M. *Serial bonds versus sinking fund bonds.* Am. City, Mar., 1917. Pp. 2.

CLADER, W. A. *Electric utilities accounting.* Journ. Account., May, 1917. Pp. 11.

Classification and operation of a system of accounts for electric utilities.

CORLISS, W. M. *Navy yard cost accounting.* Journ. Account., July, 1917.

Explains with considerable detail the cost system of one of the largest navy yards of the United States with particular reference to the methods of recording and tabulating labor and material costs.

DUNN, H. A. *Accounting inconsistencies and fallacies.* Pro. Am. Elec. Ry. Acct. Assoc., 1916. Pp. 10.

FEDDE, A. S. *Mis-stated current assets.* Journ. Account., June, 1917. Pp. 5.

Why "current assets" must be scrutinized carefully. Explains common methods of overstating the value of the various items comprising "current assets."

GANTT, H. L. *The basis of manufacturing costs.* Indus. Management, June, 1917. Pp. 2.

Advocates a separation of expense items into those that do and those that do not contribute to production. Why the machine-hour rate method of applying indirect expenses should be employed wherever possible and otherwise a uniform man rate based on man hours.

GILL, F., and COOK, W. W. *Principles involved in computing the depreciation of plant.* Surveyor & Munic. & County Engr., Feb. 9, 1917. Pp. 2.

HOPSON, H. C. *Construction records and accounts.* Journ. Account., July, 1917. Pp. 18.

Principles governing the proper charges and credits to capital or property accounts in the case of public service companies. Also takes up elements of costs and the methods for recording these costs.

LEEDS, E. P. *Analyses of gas corporation accounting.* Gas Age, Feb. 15, Mar. 1, 1917. Pp. 2, 1.

MCCORMACK, P. H. *Continuous valuation machinery.* Journ. Inst. Actuaries, Apr., 1917. Pp. 12.

Explains and illustrates with forms accurate methods of showing in the company's records continuous valuations on various types of life insurance policies.

MIDDLEDITCH, L. *Calculation of continuous compound interest.* Journ. Account., May, 1917. Pp. 11.

Develops and charts certain compound interest formulas and shows their practical importance by means of tables.

NEWCOMER, W. *Analysis of a credit statement.* Investment Weekly, July 7, 1917. Pp. 3.

President of the National Exchange Bank of Baltimore points out certain principles and policies to guide bankers in the determination of a credit risk.

WILSON, G. *The fourth factor in cost accounting.* Journ. Account., May, 1917. Pp. 5.

The necessity and importance of considering spoilage as a separate factor of manufacturing cost in many plants. Common plan of charging this cost to profit and loss or to overhead not always satisfactory.

American Institute's June examinations. Journ. Account., July, 1917. Pp. 20.

Examinations cover three subjects, auditing, commercial law, and accounting theory and practice.

Plant depreciation; a comparison of the four methods of calculating the allowance. Iron Age, Mar. 15, 1917. P. 1.

Saving labor in the accounting department. Ry. Age Gaz., June 22, 1917.

Roads are substituting women and various labor saving machines which women can run on account of liability of male employees to draft.

Uniform accounting. Federal Reserve Bull., Apr., 1917. Pp. 25.

A tentative proposal submitted by the Federal Reserve Board for a uniform system of accounting to be adopted by manufacturing and merchandising concerns. Reprinted in *Journal of Accountancy*, June, 1917.

Investments

(Abstracts by Authur S. Dewing)

CLAY, P. *Civil War stock market.* Invest. Wkly., June 9, 1917.

Very interesting comparison. Valuable for class study.

CLAY, P. *Cotton mill stocks.* Invest. Wkly., Apr. 14, 1917.

Brief digest with statistics.

CLAY, P. *Interborough Metropolitan collateral trust 4 1/2's.* Invest. Wkly., Apr. 28, 1917.

Altogether too optimistic survey of junior securities of this unfortunate company.

CLAY, P. *Irrigation district bonds.* Invest. Wkly., June 2, 1917.

Good article. But does not say "beware" strong enough.

CRAWFORD, A. *Fertilizer stocks.* Invest. Wkly., Apr. 21, 1917.

Investment position discussed, but shows great prosperity of three companies.

DEWING, A. S. *Railway equipment obligations.* Am. Econ. Rev., June, 1917. Pp. 25.

FAULKNER, J. L. *Ohio Cities Gas.* Invest. Wkly., Apr. 21, 1917.

A public utility wholesale natural gas company with oil "prospects."

FAULKNER, J. L. *Western Power Company.* Invest. Wkly., Apr. 14, 1917.

Account of a well-known public service "pyramid." Interesting and valuable statistics. Neglects to point out the weakness of company's securities by reason of underlying bonds on important parts distributing system.

GIBSON, T. *Railroad stock market.* Invest. Wkly., June 16, 1917.

Author's summary of "bargains." Not as critical of general conditions as this writer's articles usually are.

HICKERNELL. *English panics, 1895-1914*. Invest. Wkly., May 26, 1917.

Short but clear account. Diagram of European loanable funds instructive. Author should have given sources of his statistics.

MCGRATH, T. S. *Timber investments*. Invest. Wkly., May 26, 1917.

A one-sided account. Neglects difficulty in quickly liquidating on both timber lands and timber land bonds.

MORTON, A. V. *Safe investment of banking funds held by trust companies*. Trust Companies Mag., Apr., 1917.

Summary of possible channels of investments. Wisely insists on fluidity of paper bought with call deposits. Unfortunate to see writers recommend trust companies to enter underwriting syndicates under any conditions.

NEHF, H. W. *The concentration of water powers*. Journ. Pol. Econ., Oct., 1916.

Somewhat superficial account based largely on the Commissioner of Corporation's report of 1912. Suggest the great advantage of central concentrated ownership provided it does not jeopardize public interest.

PERKINS, C. H. "B. R. T."—*Third Avenue*. Invest. Wkly., May 12, 1917.

Study of two New York city traction companies. Prospects are not very encouraging.

PERKINS, C. H. *Crucible steel*. Invest. Wkly., Apr. 14, 1917.

Interesting statistical account of a "semi" unfortunate "war baby."

ROLLINS, M. *The telephone*. Invest. Wkly., Apr. 28, 1917.

A popular article.

ROSENTHAL, A. U. *Wabash Pittsburgh Terminal Railway prospects*. Invest. Wkly., Apr. 14, 1917.

Implies that because reorganization drastic, future assured. Difficult to see any future in this Gould blunder, and above review naïvely uncritical.

SELDEN, G. C. *Why industrials do not respond to earnings*. Invest. Wkly., May 5, 1917.

Public investors truly recognize the transitory character of present large earnings. Yet, transient as are present large earnings, the industrials are being put in a strong position as regards quick assets.

SELWYN-BROWN, A. *Public utility bonds as legal investments*. Invest. Wkly., Apr. 28, 1917.

Timely article emphasizing, as many think, that these bonds are among the strongest corporate obligations. Should be made legal by state laws for savings banks. Movement is certainly in this direction.

UFMANN, L. U. *Republic Iron and Steel*. Invest. Wkly. Apr. 21, 1917.

A small rather conservatively managed steel company. Instructive as showing condition of medium size steel unit.

"A STOCKHOLDER." *Depreciation of British home investments*. Econ. Journ., June, 1917.

Carefully prepared statistical tables. Most comprehensive brief

summary of subject yet prepared. Shows that "average" British railway common stocks have declined but little; British railway debentures most. British railway bonds, as whole, decline less than French.

Labor and Labor Organizations

(Abstracts by G. E. Barnett)

ADLER, H. M. *Unemployment and personality—a study of psychopathic cases.* Mental Hygiene, Jan., 1917. Pp. 9.

CLARK, L. D. *Recent Supreme Court decisions and the labor contract.* Mo. Rev. U. S. Bureau Labor Stat., May, 1917. Pp. 21.

Reviews the decisions in the Adamson eight-hour law case, the Oregon ten-hour law case, and the Oregon minimum wage case.

DEIBLER, F. S. *The Oregon minimum wage cases.* Am. Econ. Rev., Sept., 1917. Pp. 4.

FITCH, J. A. *Hours and output.* Survey, May 12, 1917. Pp. 2.

An illustration of the effect of shorter hours on output.

GLEASON, A. *The discovery. An account of a new way to industrial peace in Great Britain.* Survey, May 19, 1917. Pp. 3.

Illustrations of the spread of collective bargaining in England during the war.

HAMMOND, M. B. *The regulation of wages in New Zealand.* Quart. Journ. Econ., May, 1917. Pp. 43.

Analyzes the principles on which the court has acted in fixing minimum rates.

HOWARD, S. E. *The Fall River sliding scale experiment of 1905-1910.* Am. Econ. Rev., Sept., 1917. Pp. 22.

KAHN, M. H. *Report of the committee on industrial hygiene of the Retail Dry Goods Association.* Medical Rec., Nov., 1916. Pp. 10.

KELLY, R. W. *Hiring the worker.* Indus. Management, Apr., 1917. Pp. 16.

Application forms, interviews, medical examinations, and references.

MOWERY, H. W. *Cause and prevention of industrial casualty.* Indus. Management, May, 1917. Pp. 13.

Stresses the importance of slipping and tripping as factors in accidents.

NORTHCOTT, C. H. *Organization of labor for war.* Pol. Sci. Quart., June, 1917. Pp. 16.

Reviews the dealings of the English government with labor.

POWELL, T. R. *The Oregon minimum-wage cases.* Pol. Sci. Quart., June, 1917. Pp. 17.

Reviews the brief submitted on behalf of the state upholding the constitutionality of the law.

RATHBONE, E. *The remuneration of women's services.* Econ. Journ., Mar., 1917. Pp. 13.

If the state should take upon itself the cost of rearing children, the main reason for the difference in wages between the sexes would be removed.

SELEKMAN, B. M. *Nine years of the Canadian industrial disputes act.* Survey, Mar. 31, 1917. Pp. 8.

The act has been valuable as a means of promoting conciliation, but the compulsory features have not been effective.

British labor message to American workers. Am. Federationist, June, 1917. Pp. 12.

Addresses of the labor members of the British Commission before the Committee on Labor of the Council of National Defense.

The industrial disputes investigation act, 1907. Proceedings for the ten-year period 1907-1917, and for the fiscal year 1916-1917. Labour Gaz. (Ottawa), May, 1917. Pp. 17.

Minimum wage in Massachusetts. Mo. Rev. U. S. Bureau Labor Stat., May, 1917. Pp. 7.

Abstracts of recent reports of the Minimum Wage Commission of Massachusetts.

Operation of the minimum-wage law in the state of Washington. Mo. Bull. Bureau Labor Stat., Apr., 1917. Pp. 10.

Abstract of the second biennial report of the Industrial Welfare Commission of Oregon.

Protection of labor standards. Mo. Rev. U. S. Bureau Labor Stat., May, 1917. Pp. 15.

Recommendations of the Committee on Labor, Advisory Commission, Council of National Defense.

9- *Stabilizing industrial employment.* Ann. Am. Acad., May, 1917. Pp. 224.

Series of papers, chiefly by employers and employment managers, on methods of reducing labor turnover.

Money, Prices, Credit, and Banking

(Abstracts by Chester A. Phillips)

COURVITCH, P. P. *Gresham's law in foreign exchange.* Annalist, Apr. 23, 1917.

The dollar has become a function of the pound sterling and is therefore at a discount in neutral countries.

DEWAVRIN, M. *Les nouvelles lois sur le crédit aux petites entreprises.* Journ. des Econ., May, 1917. Pp. 13.

An analysis of the law of March 13, 1917, which provided for the establishment of coöperative banks and societies for small manufacturing and trading enterprises. The advance of funds in liberal amount and without interest to the new organizations by the Bank of France through the state is regarded as a feature of questionable expediency.

DJÖRUP, C. *Acceptances.* Bankers Mag., Apr., 1917. Pp. 4.

The nature and advantages of acceptances. The banker's risk where a trust receipt covers commodities subject to great fluctuation in price.

Bankers should be on guard against the assignment of invoices pertaining to goods secured by traders under trust receipt.

HOFFMANN, I. N. *Our loans to the allies and the future of gold investments.* Journ. Am. Bankers Assoc., May, 1917. Pp. 2.

England has been liberal in shipping gold to us for wholly selfish reasons, *i.e.*, in order to keep money rates low in this country. It would be unseemly for her to discontinue gold shipments now when the rate for her future borrowing here has been practically fixed.

LEWIS, G. *Vitalization of country's gold resources a problem for the reserve system.* Journ. Am. Bankers Assoc., May, 1917. Pp. 2.

Recommends counting gold in the hands of federal reserve agents as part of reserve held by the regional banks against notes issued. Considers that the mobilization of gold in circulation would also be desirable.

LIONEERGER, I. H. *Money and credit.* Banking Law Journ., Apr., 1917. Pp. 9.

The chief weakness of the federal reserve system is the false assurance which it holds out to bankers that they may recklessly lend out their resources during periods of prosperity and later rely on the assistance of the reserve banks in time of crisis. However, the system admits of a highly beneficial use. It should "put a bit in the mouth of enterprise and not a lash upon its back."

LORIA, A. *Il sistema monetario del cambio aureo.* Rif. Soc., Mar.-Apr., 1917. Pp. 32.

The situation of gold exchange in several countries, with a special study of Fisher's compensated dollar.

MARSH, A. R. *The insurance principle of average in its application to banking.* Econ. Wld., Apr. 23, 1917. Pp. 4.

A study of the law of average as applied mainly to individual saving and business insolvencies and partial failures.

OPPENHEIM, A. *Foreign exchange—an opportunity.* Investment Weekly, May 26, 1917. Pp. 4.

A diagrammatic exposition of the investment opportunities and disadvantages arising from the foreign exchange situation.

OREFICE, I. *L'assicurazione di credito.* Riv. di Sci. Bancaria, Oct.-Dec., 1916. Pp. 14.

Shortly after the war broke out England adopted certain novel measures for the safeguarding of credit, concerning the value of which a controversy has appeared in Italy.

PAGET, J. *The Gilbert lectures, 1917. Lectures II and III.* Journ. Inst. Bankers, Apr., 1917. Pp. 13.

Some legal aspects of such topics as cheques signed in blank, notice of dishonor, and time within which cheques must be presented.

RATTO, L. *La crisi dei cambi e il problema degli accordi interfederali di tariffa.* Riv. Intern., Mar., 1917. Pp. 26.

Written before the fall in exchange rates consequent upon entrance of the United States into the war.

ROVENSKY, J. E. *Readjustments in the world's finances made necessary by a shifting foundation of gold.* Econ. Wld., Apr. 7, 1917. Pp. 6.

The process by which England and France have financed the purchases of the allies in this country. The problem of regulating the outflow of gold at the close of the war.

SCHWEDTMAN, F. C. *Lending our financial machinery to Latin America.* Am. Pol. Sci. Rev., May, 1917. Pp. 13.

In a sound and aggressive South American trade campaign we must develop and correlate such factors as a prosperous merchant marine, a network of branch banks, investment agencies for placing American capital safely and advantageously, a trained personnel, and more means for personal contact with our South American neighbors.

SYKES, E. *Mr. Robert Benson on the "Quantity theory of money."* Journ. Inst. Bankers, May, 1917. Pp. 4.

"Mr. Benson is convicted out of his own mouth. It is not, he says, duplication of credit which raises prices, but increased demand. *But duplication of credit is the direct cause of increased demand.*"

TAUSSIG, F. W. *International trade under depreciated paper. A contribution to theory.* Quart. Journ. Econ., May, 1917. Pp. 24.

THIRALLS, J. *Report of committee of twenty-five on the clearing and collection problem.* Journ. Am. Bankers Assoc., May, 1917. Pp. 25.

The committee is continuing its efforts to secure relief for banks in connection with the clearing and collection problem through an amendment to the federal reserve act. With reference to legislation the Federal Reserve Board would be neutral.

VAIDYARAMAN, G. A. *Indian currency and finance.* Wealth of India, Jan., 1917. Pp. 12.

India, due to the war, has become a creditor country. She has sent jute goods and hides to United States and cotton to Japan. For these exports payment has been made, not to India, but to England, in munitions and supplies. England, on account of the exigencies of the war, has cut off her main exports to India, railway materials, and other iron and steel manufactures. Under these conditions and in the absence of unrestricted gold exports from Great Britain the gold exchange standard of India is being tested decisively.

WESTERFIELD, R. B. *The reserves situation in the federal reserve system.* Am. Econ. Rev., Sept., 1917. Pp. 21.

WILLIS, H. P. *Kemmerer's "Modern Currency Reforms."* Quart. Journ. Econ., May, 1917. Pp. 7.

A critical analysis and appreciative summary. Directs attention to the timely importance of the volume when monetary and banking systems of belligerent countries are likely soon to be subjected to extensive revision.

WILLIS, H. P. *The Philippine national bank.* Journ. Pol. Econ., May, 1917. Pp. 32.

Banking conditions in the Philippines. The personnel and unique equipment of the bank; its policy and relations.

WILSON, F. R. *The federal farm loan board.* Case & Comment, June, 1917. Pp. 4.

The constitutionality of the federal farm loan act and an explanatory account of the main features of the system. A likely increase in the business of inspecting and preparing titles should appeal to the business sense of the legal profession. (Portrait illustrations.)

WITHERS, H. *The British money market after the war.* Econ. Wld., May 26, 1917. Pp. 5.

Conditional prophecies put forward without apprehension as to the position of London as the world's leading monetary center after the war.

Agricultural credit in Bosnia and Herzegovina. Intern. Rev. Agri. Econ., Feb. 1917. Pp. 11.

Canadian banking in 1916. Bankers' Mag. (London), May, 1917. Pp. 10.

An account of general expansion of operations.

A municipal savings bank. Canadian Munic. Journ., May, 1917. Pp. 3.

Account of the municipal savings bank of Birmingham, England.

The progress of banking in Great Britain and Ireland during 1916. Bankers' Mag. (London), May, 1917. Pp. 25.

With no change in the number of banks in Great Britain during 1916, a decline from 8.8 to 7 per cent in their ratio of capital and "reserve," i.e., surplus, to deposits and notes issued, the proportion of cash to deposits and note circulation witnessed an increase from 26 to 30 per cent. The increase in deposits during the same period was from £1,504,901,050 to £1,714,879,251.

Scotland and the Bank of England. Scottish Bankers Mag., Apr., 1917. Pp. 12.

The disabilities of Scotland arising from the practices employed by the Bank of England in the transfer of stocks and other property.

Les opérations de la Banque de France pendant l'année 1916. L'Econ. Franç., Apr. 14, 1917. Pp. 3.

Public Finance

(Abstracts by Charles P. Huse)

ADAMS, T. S. *The concentration of taxes upon wealth and business.* Bankers' Mag., May, 1917. Pp. 6.

Describes trend of recent taxation in the United States and outlines plan for meeting war expenditures.

ADAMS, T. S. *Customary war finance.* New Republic, Apr. 7, 1917. Pp. 3.

Exemption of government bonds from taxation is bad from fiscal, political, and social points of view.

ADAMS, T. S. *Defects of the excess-profits tax law.* Annalist, June 4, 1917.

Recommends adoption of English plan by United States.

AMOROSO, L. *Il costo della guerra.* Giorn. d. Econ., Dec., 1916. Pp. 23.

ANDERSON, B. M. *Should wealth be conscripted.* Annalist, Apr. 16, 1917.

Assuming that the war will end within a year, the author recommends financing by loans rather than by taxes.

ARTAUD, A. *Péril national et richesse nationale (rapport de M. Adrien Artaud adopté par la Chambre de Commerce de Marseille)*. Monde Econ., Mar. 17. Pp. 7.

Concludes a survey of the alcohol industry in France with a plea for regulation but not suppression.

BASTABLE, C. F. *British financial organisation*. Econ. Journ., Mar., 1917. Pp. 5.

Reviews recent literature on the British financial system.

BLACK, H. C. *Sociological aspects of the income tax*. Case & Comment, Mar., 1917. Pp. 5.

Deplores the tendency in the United States to place the burden of public expenditures upon a few, and recommends lowering the exemption of the federal income tax.

BLAKEMORE, A. W. *The federal inheritance tax law of 1916*. Case & Comment, Mar., 1917. Pp. 4.

Outlines the law and points out various defects, such as the imposition of the tax on the entire estate rather than on shares of the beneficiaries.

BROWN, H. G. *The ethics of land-value taxation*. Journ. Pol. Econ., May, 1917. Pp. 29.

An interesting discussion of the justice of the single tax from various points of view.

BULLOCK, C. J. *Financing the war*. Quart. Journ. Econ., May, 1917. Pp. 23.

A review of the financial policies followed by the United States in former wars points to the advantage of relying to a considerable degree on taxation. The income and excess profits taxes, but not the inheritance, should be increased, rates on spirits, beer, and tobacco should be raised and tea and coffee taxed.

CHASE, H. S. *The budget amendment of the Maryland constitution*. Nat. Munic. Rev., May, 1917. Pp. 4.

A defense of the amendment by one of its authors.

DAVENPORT, H. J. *How war will curtail buying power*. Annalist, May 28, 1917. Pp. 2.

Estimates that American people must curtail their consumption by one quarter to finance the war.

ELLIOTT, S. B. *The taxation of timber lands in Pennsylvania*. Journ. Engineers' Soc. of Penn., Nov., Dec., 1916. Pp. 5.

FAIRCHILD, F. R. *The tax system of Connecticut*. Am. Econ. Rev., Sept., 1917. Pp. 4.

FROST, T. G. *Inequalities of the federal income tax*. Case & Comment, Mar., 1917. Pp. 3.

Finds defects in administration and recommends the exemption be lowered to \$1,000.

FULLER, O. B. *Taxation of mortgages and bonds.* Pro. Mich. State Tax Assoc., 1917. Pp. 12.

GRIZIOTTI, B. *La diversa pressione tributaria del prestito e dell'imposta.* Giorn. d. Econ., Mar., 1917. Pp. 36.

HARISTOX, J. *L'impôt sur le revenu.* Rev. Sci. Légis. Finan., Jan.-Mar., 1917. Pp. 52.

A critical account of the French income tax with much of the text of the tax law appended.

JÈZE, G. *Les finances de guerre de l'Angleterre: Les economies publiques.* Rev. Sci. Légis. Finan., Jan.-Mar., 1917. Pp. 34.

An account of the movement to secure economies in the British public service by such methods as reductions in the number of employees and restrictions on the loans of local governments.

KEMMERER, E. W. *Some highly undesirable effects of the exemption of government obligations from income taxation.* Econ. Wld., May 12, 1917. Pp. 2.

Exemption of United States bonds from income tax will induce the rich to buy them to escape supertaxes, and thus lose to the government the advantages of a popular loan.

LACHAPELLE, G. *Le 2^e emprunt de la défense nationale.* Rev. Pol. et Parl., Dec. 10, 1916.

MALOX, W. M. *A real advance in state finance.* Case & Comment, Mar., 1917. Pp. 5.

Traces the course of events which led to the adoption of the constitutional amendment in Maryland reserving to the governor the right to originate appropriation bills.

MARSH, A. R. *Collateral effects of severe taxation of incomes and profits.* Econ. Wld., Apr. 21, 1917. Pp. 2.

A discussion of the repressive effects of heavy taxation with illustrations from English experience.

MARSH, A. R. *Some considerations in connection with war taxation.* Econ. Wld., Apr. 14, 1917. Pp. 2.

Emphasizes limits to war taxation.

MEILLET. *Le marché de l'emprunt national.* Le Monde Econ., May 19, 1917. Pp. 4.

Believes French government would gain by making market for its bonds free.

MORTON, R. L. *The Virginia state debt and internal improvements, 1820-1838.* Journ. Pol. Econ., Apr., 1917. Pp. 35.

An interesting account of the beginning of state aid after the Revolution, its very great increase in the thirties, unchecked by the panic of 1837, and the part played by sectionalism in the movement.

NOYES, A. D. *The war finance plans.* Bankers Mag., 1917. Pp. 6.

Discusses probable financial effects of American war loans.

PIGOU, A. C. *The economics of the war loan.* Econ. Journ., Mar., 1917. Pp. 10.

A clear and interesting exposition of the economic principles involved in the various methods of war financing.

PISTOLESE, S. *Credito pubblico e privato nella finanza di guerra inglese*. Riv. di Sci. Bancaria, Sept., 1916.

POWELL, F. W. *The problem of additional sources of city revenue*. Am. City, Jan., 1917. Pp. 3.

POWERS, L. G. *Popular control of governmental finances by executive budgets*. Case & Comment, Mar., 1917. Pp. 5.

Urges adoption of British budgetary system in the United States.

RAFFALOVICH, A. *Les finances allemandes*. L'Econ. Franç., May 12, 1917. Pp. 3.

A brief account of German methods of financing the war, including the regulation of foreign exchanges.

RAFFALOVICH, A. *L'emprunt britannique*. Journ. des Econ., Mar. 15, 1917. Pp. 7.

Describes the raising of the last British loan.

RICARD, P. L. *Les finances de guerre de l'Allemagne*. Rev. Pol. et Parl., Nov. 10, 1916.

SAWISTOWSKY, R. E. *How Davenport (Iowa) proportions paving-assessment benefits. Method devised to eliminate unfairness of the front-foot rule as a basis for computing taxes*. Engg. Rec., Mar. 10, 1917. Pp. 2.

SEIDMAN, F. E. *Effect of income on interest rates*. Annalist, June 4, 1917.

Believes that high rates imposed on large incomes by new revenue bill will increase the rate of interest.

SPRAGUE, O. M. W. *The conscription of income*. Econ. Journ., Mar., 1917. Pp. 15.

Presents a strong plea for financing the war from taxes rather than loans.

STAMP, J. C. *Taxation of excess profits abroad*. Econ. Journ., Mar., 1917. Pp. 12.

A useful account of the origin and development of the excess profits tax in the various countries.

TAUSSIG, F. W. *The scope and work of the United States tariff commission*. Econ. Wld., June 9, 1917. Pp. 4.

Outlines powers of commission and work contemplated.

UCHIIKE, F., and others. *Japanese administration and finance*. Munic. Research, Mar., 1917. Pp. 72.

A collection of articles on Japanese financial administration, both central and local.

WAGEL, S. R. *War financing of the belligerent countries of Europe*. Journ. Am. Bankers Assoc., May, 1917. Pp. 4.

A brief statement of the methods by which England has met war expenditures and regulated the economic life of her people.

WILLIAMSON, C. C. *State budget reform*. Case & Comment, Mar., 1917. Pp. 5.

A critical survey of various state budgets.

WRIGHT, J. *Excess profits tax in Great Britain*. Journ. Account., June, 1917. Pp. 6.

A concise statement of the British excess profits tax.

China's new budget and the progress of Chinese governmental finance. Econ. Wld., Apr. 14, 1917. Pp. 2.

The new government has developed old forms of taxation, introduced new, and made progress in placing domestic loans.

The effects of exemption of railroads from special assessments. Minn. Municipalities, Apr., 1917. Pp. 3.

A federal license and commercial tax. Banking Law Journ., May, 1917. Pp. 3.

Suggests plan for federal tax on businesses and their gross sales.

The reform of the land tax from the point of view of agriculture and breeding. Intern. Rev. Agri. Econ., Feb., 1917. Pp. 9.

Describes recent reforms in Uruguay.

Subscription plans. Greater N. Y., June 4, 1917. Pp. 5.

Gives methods used by various business houses in aiding their employees to purchase liberty bonds.

War financing of France and Germany. Journ. Am. Bankers Assoc., June, 1917. Pp. 5.

A brief comparison of the methods of war financing employed by France and Germany.

Les emprunts de guerre de l'Allemagne. A propos du sixième emprunt. L'Econ. Franc., Mar. 24, 1917. Pp. 3.

Describes Germany's method of raising war loans.

La progression des dépenses publiques de guerre en Angleterre: discours de Mr. Bonar Law, 14 décembre 1916; 12 février 1917. Rev. Sci. Légis. Finan., Jan.-Mar., 1917. Pp. 14.

Gives two recent speeches of the chancellor of the exchequer.

Housing

(Abstracts by James Ford)

CLOSE, C. L. *The economic saving of human resources*. Sci. Mo., May, 1917.

Welfare work of the United States Steel Corporation including housing.

FORD, G. B. *City planning in war time*. Am. City, June, 1917. Pp. 4.

Especial reference to experience of France.

LEWIS, N. P. *The methods of financing city planning projects*. Nat. Munic. Rev., May, 1917.

Discusses bonds and special assessments.

SINSHEIMER, A. *Goodyear builds city for its workers; 1,500 persons comfortably housed in 200 homes—1,000 more homes planned—tire company's*

solution of a big present-day manufacturers' problem—making Goodyear Heights attractive. Automobile, Mar. 1, 1917. Pp. 3.

VEILLER, L. *Industrial housing.* Am. Architect, Jan. 17, 31, Feb. 7, March 7, 1917. Pp. 3, 3, 3, 3.

VEILLER, L. *Problem of housing industrial workers; duty of employer of labor to concern himself about conditions under which workmen live.* Record & Guide, Jan. 13, 1917. P. 1.

Insurance and Pensions

(Abstracts by Henry J. Harris)

ANDERSON, E. B. *Burglary and theft coverage.* Econ. Wld., Apr. 7, 1917. Pp. 3.
Description of various types of policies and risks covered.

BELLOM, M. *L'obligation en matière d'assurance maritime du risque de guerre.* L'Econ. Franç., May 12, 1917. Pp. 3.

It would be illogical and unscientific to extend the requirement of compulsory insurance of ships to the cargoes.

COX, R. L. *Recent developments in the life insurance field.* Sci. Mo., Apr., 1917. Pp. 6.

Incidental benefits, prevention of disease, etc.

FISK, E. L. *Life insurance and life conservation.* Sci. Mo., Apr., 1917. Pp. 13.

Importance of periodic health examination of policy holders.

FISKE, H. *Life insurance as the basis of social economy.* Sci. Mo., Apr., 1917. Pp. 7.

Work of the life companies in promoting the welfare of their policy holders.

GOTTSCHALK, A. L. M. *Observations on the existing status of insurance in Brazil.* Econ. Wld., Apr. 14, 1917. Pp. 2.

Governments decrees and regulations for all forms of insurance.

HARRIS, G. K. *Rating schedules for fire insurance on the Pacific coast and elsewhere.* Econ. Wld., May 12, 1917. Pp. 3.

The Pacific coast states are, in general, following the practice of the Eastern states, but have not yet come to any uniformity of action in the use of schedules.

HOFFMAN, F. L. *Conclusions regarding the necessity and advisability of compulsory health insurance in the United States.* Econ. Wld., Apr. 28, 1917. Pp. 4.

No thoroughly qualified and impartial investigation of European social insurance systems has thus far been made for the purpose of considering the practical application of these systems to American conditions. There is also a lack of information concerning actual conditions in the United States.

HUEBNER, S. S. *Life insurance and the war.* Sci. Mo., Apr., 1917. Pp. 12.

Discusses financial effects of the war, extent of claims due to army mortality, use of policy restrictions upon military and naval service and the "after-war" effects on those who serve in armies.

MACADAM, G. *Do we want to pay the health insurance bill?* N. Y. Times Mag., Mar. 11, 1917. Pp. 2.

Plan proposed would give country a small return for large outlay.

MCADOO, W. G. *Arrangements for insuring seamen against war risks.* Official Bulletin, June 20, 1917. P. 1.

Insurance of seamen on merchant vessels to be mandatory for voyages to Europe and Mediterranean, permissive to other parts. Rate to Europe is 75 cents per \$100 of policy.

MACLEAN, A. T. *War and life insurance.* Econ. Wld., May 5, 1917. Pp. 2.

Chief war problems are (1) depreciation in value of investments, (2) increased death claims, (3) withdrawal of cash and other values, and (4) increase in taxation.

RITTENHOUSE, E. E. *Thrift from the life insurance viewpoint.* Sci. Mo., Apr., 1917. Pp. 5.

WOODWARD, J. H. *Provision for expenses in workmen's compensation premiums.* Econ. Wld., June 2, 1917. Pp. 3.

Formula for a system of loading based on the thesis that a constant charge per policy yields better results than a minimum premium and is more susceptible of theoretical justification.

Compulsory health insurance proposed by Social Insurance Commission of California. Mo. Bull. Bureau Labor Stat., Apr., 1917. Pp. 11.

Digest of the report of the commission.

The health insurance amendment. Trans. Commonwealth Club of Calif., June, 1917. Pp. 55.

Arguments for and against the proposed state constitutional amendment authorizing the enactment of a health insurance law.

Human losses in the war. Bull. of the War Study Society of Copenhagen, Aug., 1916. Pp. 32.

An attempt to estimate the direct losses of men sustained by the armies during the first two years of the war. The summary table in the introduction gives: dead 4,631,500; wounded 11,245,300; invalids 3,373,700. Writer gives careful references to his sources.

Marine insurance: books and pamphlets in the library of the Insurance Society of New York. News Letter, Mar., 1917. Pp. 2.

Titles of about 60 important works.

National insurance acts. The departmental committee's further and final reports. Journ. Inst. Actuaries, Apr., 1917. Pp. 11.

The two reports of this committee (Cd. 8296 and Cd. 8451) contain proposals for the fundamental reconstruction of certain small but important parts of the British health insurance structure. The treatment of cases of venereal disease and of causes of tubercular disease call for modification of the present practice of the approved societies.

Some objections to compulsory health insurance. Mo. Bull. Bureau Labor Stat., Apr., 1917. Pp. 6.

Digest of a number of pamphlets containing objections to the bill

for compulsory health insurance drafted by the American Association for Labor Legislation.

State hail insurance in North Dakota. Intern. Rev. Agri. Econ., Feb., 1917. Pp. 9.

Review of the last two reports of the state hail insurance commissioner.

Pauperism and Charities

(Abstracts by F. D. Watson)

BOYLAN, M. *Methods of charity in Bridgeport.* Catholic Charities Rev., Apr., 1917.

Describes the work of the Catholic Charitable Bureau of Bridgeport under the divisions of relief, rehabilitation, and prevention.

BELLOM, M. *Les sociétés de secours mutuels en temps de guerre: la guerre en 1914.* L'Econ. Franç., Mar. 17, 1917.

An account of the activities of the societies of mutual aid of France in the present war wherein is shown how little their work has been hampered by existing hostilities.

BRIGGS, R. *The associated Catholic charities of Baltimore.* Catholic Charities Rev., Apr., 1917.

A brief description of the work of some fifteen Catholic social agencies in Baltimore.

DARWIN, J. L. *Distress amongst the professional classes.* Charity Organ. Rev., May, 1917.

An account of the experiences of the author in connection with the Professional Classes War Relief Council of England of which he is chairman. The council aims to find employment for those of the professional classes thrown out of employment by the war or to aid in other ways.

NOTES

A special meeting of the Executive Committee of the American Economic Association was held in New York on June 2, 1917. At the request of President Commons it was voted to hold the coming annual meeting in Philadelphia, instead of Rochester, which had been the original choice.

At this meeting discussion was given to the advisability of the organized coöperation of economists in the work of the war. A proposal to constitute a number of committees to investigate and report upon some of the principal economic problems of the war received an adverse vote. The opinion of the majority was that such a step might possibly result in the unnecessary duplication of work already being done by other agencies, and that it would be contrary to the traditions of the Association and, in particular, to the provision of our constitution that "the Association as such will take no partisan attitude, nor will it commit its members to any position on practical economic questions." It was agreed, however, that the Association might advisably do what it could to aid the government in securing the services of economic experts and to inform such economists as desire to enter the national service with respect to the particular employments in which they might be most useful. For the purpose of furthering these ends, a special committee was appointed, with headquarters in Washington, consisting of F. W. Taussig (chairman), G. E. Barnett, and the Secretary of the Association.

In accordance with this purpose the Executive Committee of the Association has made an arrangement with the United States Civil Service Commission at Washington by which the special committee mentioned above will coöperate with the Civil Service Commission in the registration of economic experts for governmental service. The Civil Service Commission has accordingly distributed to members of the Association a return registration blank in which members are requested to state their special fields of interest, their professional equipment and for what duration they could accept appointment in case of urgent governmental need.

Since May 1, 1917, the following names have been added to the membership of the American Economic Association:

Barber, William A., 32 Waverly Place, New York City
Bauman, John, Eau Claire, Wis.
Baxter, A. J., 71 Broadway, New York City
Bodell, J. J., 453 Hope St., Providence, R. I.

- Boyle, O. A., Wichita, Kansas
Brecher, G. A., 451 West Ontario St., Chicago, Ill.
Brown, Guy M., Fayette City National Bank, Fayette City, Pa.
Bush, W. T., Columbia University, New York City
Callender, A. A., 425 West 114th St., New York City
Campbell, J. A., 539 Pender St., West, Vancouver, B. C.
Cavan, Howard, Elwood, Indiana
Chapman, Philip F., 185 Middle St., Portland, Maine
Colman, Howard D., care of Barber-Colman Co., Rockford, Ill.
Collings, Harry T., 308 S. Burrows St., State College, Pa.
Cook, George E., 30 East 34th St., New York City
Den, A., Room 1640 Woolworth Bldg., New York City
Duffus, William M., University of Kansas, Lawrence, Kansas
Goodman, J. F., Keith & Perry Bldg., Kansas City, Mo.
Graham, G. E., Elm & Market Sts., Dallas, Texas
Hall, C. W., 121 N. Oak St., Centralia, Ill.
Hauserman, E. F., 1729 East 22d St., Cleveland, Ohio
Hodgson, Caspar W., 313 Park Hill Ave., Yonkers, N. Y.
Howell, C. F., 175 West Jackson Blvd., Chicago, Ill.
Hunkins, Carl B., Billings, Montana
Jackson, J. Hugh, University of Oregon, Eugene, Oregon
Keency, C. H., P. O. Box 846, Hartford, Conn.
Keller, Frederick A., 405 N. Second St., Camden, N. J.
Kemmerer, A. E., 1269 East 125th St., Cleveland, Ohio
Kryshtofovich, Theo., Poste Restante, Petrograd, Russia
Ladish, H. W., The Ladish-Stoppenbach Co., Milwaukee, Wis.
Lewis, David J., U. S. Tariff Commission, Washington, D. C.
Lewis, James G., Forbes & Stevens Sts., Pittsburgh, Pa.
McCubbin, T. P., 314 Market St., Harrisburg, Pa.
Marsh, R. K., 2271 Clermont St., Denver, Colorado
Mittelman, E. B., 658 East 51st St., Chicago, Ill.
Morris, Bernard, 2082 West 16th St., Wilmington, Del.
Murbach, Ralph, Elyria, Ohio
Orr, Robert K., Michigan Employers Casualty Co., Lansing Mich.
Parker, Frank, University of Pennsylvania, Philadelphia, Pa.
Phillips, Osmund, 2316 Avenue J., Brooklyn, N. Y.
Powell, Elias, 615 State St., Madison, Wis.
Power, Ralph L., 525 Boylston St., Boston, Mass.
Ramsay, Andrew, Mount Savage, Maryland
Richmond, Stacy, 59 Cedar St., New York City
Rosebush, Judson G., Appleton, Wis.
Ruhl, G. A., Palquemine, La.
Ross, P. H. W., National Marine League, 18 Old Slip, New York City
Sakamoto, Y., Satobu Surugacho, Nihonbashi, Tokyo, Japan
Schulderberg, W. F., Bank St., Baltimore, Md.
Scovell, T. H., 681 Olive St., Shreveport, La.
Seligman, A. R., 555 Park Ave., New York City
Sorenson, A. W., 487 A. First St., San Jose, California
Sullivan, Robert J., 1337 Park St., West Hartford, Conn.

Tenny, John, Jr., Howe Rubber Co., New Brunswick, N. J.
Tanenbaum, Jerome, 640 Broadway, New York City
Wehrwein, George S., University of Texas, Austin, Texas
Whaling, H. B., University of North Dakota, University, N. Dak.
White, Alexander M., 423 West 118th St., New York City
White, Edwin, 93 East 4th St., St. Paul, Minn.
Wilson, Alexander M., 423 West 118th St., New York City
Woodward, Joseph H., 230 Fifth Ave., New York City
Youngholm, A., 40 Second St., San Francisco, California

A new Division of War Trade Statistics has been established in the federal Bureau of Foreign and Domestic Commerce. A number of economists and statisticians are employed in the work of the new division, some of them for the summer and some for a longer period. The list includes W. M. Adriance, John L. Coulter, Wilfred Eldred, Grover G. Huebner, Lincoln Hutchinson, Emory R. Johnson, Kemper Simpson, Guy E. Snider, A. B. Wolfe, and Allyn A. Young. Professor Young has been appointed chief of the division.

A voluntary and unofficial organization known as the National Board for Historical Service, with headquarters at Washington, has been established for the purpose of organizing the services of historical workers of the United States. This board is composed of the following persons: Victor S. Clark, Robert D. W. Connor, Carl R. Fish, Charles D. Hazen, Charles H. Hull, Gaillard Hunt, Waldo G. Leland, James T. Shotwell, and Frederick J. Turner. The address of the secretary, Mr. Leland, is 133 Woodward Building, Washington, D. C.

Professor Simon N. Patten was this spring retired from the faculty of the University of Pennsylvania on account of the age limit. Four members of the faculty reached the retiring age at the same time. The three others were continued as Professors Emeritus. The faculty of the Wharton School unanimously voted a request to the board of trustees that Dr. Patten should be continued on the faculty, but this was not acceded to.

Professor W. Z. Ripley is preparing a part of the final report of the Federal Eight Hour Commission, and in connection therewith has made observation trips, testing different branches of the service in the West and elsewhere. His report will deal with the status and development of the trainmen's schedules and agreements under which the Adamson law has to be applied.

Professor A. N. Holcombe, of Harvard University, is engaged with the United States Bureau of Efficiency in making a survey of the

executive departments and independent establishments with a view to the discovery of the duplication of statistical and other work.

Dr. N. I. Stone is making a study of the income tax in its statistical and administrative aspects for the Institute of Government Research, Washington, D. C.

Mr. Edward A. Brand has resigned temporarily as one of the assistant chiefs of the Bureau of Foreign and Domestic Commerce in order to make a study of trade conditions in South America, in the capacity of special trade commissioner. In his stead Mr. B. S. Cutler has been appointed; and as successor to Dr. Rutter, who is now commercial attaché at Tokyo, Mr. Chauncey D. Snow has been appointed.

Mr. Henry Bruère, former city chamberlain of New York, is serving on a commission to bring about an administrative reorganization of Mexican finance.

Dr. I. M. Rubinow has been appointed director of the Bureau of Social Statistics of the Department of Public Charities of the City of New York. This bureau has been established by Commissioner Kingsbury for the study of the problem of dependency and destitution in New York City, and of the efficacy of the methods of the department in dealing with these problems.

Professor Carroll W. Doten, of the Massachusetts Institute of Technology, has been appointed on the new State Immigration Board created by the last legislature. This board is to assist immigrants upon their arrival in Massachusetts and to endeavor to Americanize aliens and acquaint them with American ideas and customs.

Ralph C. Whitnack, professor of economics at Keio University, Tokyo, Japan, sometime Austin Fellow at Harvard University, has resigned to accept a reappointment as Secretary of Council and Economic Adviser to His Highness the Maharajah Gaekwar of Baroda. The government of India has given its sanction to the appointment, and Mr. Whitnack will take up his new responsibilities in September. During a previous incumbency of the office of Economic Adviser at Baroda, Mr. Whitnack was instrumental in establishing the Bank of Baroda, Ltd., in abolishing harassing frontier tariffs, and in promoting industries with an aggregate capitalization of \$1,400,000. In addition to his other duties he will lecture at the Baroda College (a branch of Bombay University) on Japanese economic policies.

A joint conference of the Western Economic Society and the City

Club was held in Chicago, June 21-22, 1917, to consider the subject of "Financial mobilization for war." The following papers were discussed: "The financial requirements of the situation," by Professor E. R. A. Seligman; "Bonds or taxes, in what proportion," by Professor E. Dana Durand; "Industrial conscription," by Professor Harold G. Moulton; "Lessons from our past," by Professor Ernest L. Bogart; "Lessons from English taxation in the present war," by Professor Carl C. Plehn; "Taxation and business," by Mr. Lucius Teter; "Income and excess profits taxes," by Professor T. S. Adams; "Bond issues and the money market," by Professor William A. Scott; and "Federal reserve banks and war finance," by Mr. A. C. Miller.

The School of Commerce of the University of Nebraska is offering evening classes for business men in the city of Lincoln.

Among the courses recently offered in the Summer School of Arts and Sciences at Harvard University was one by Professor James Ford on the principles and methods of war relief.

A circular announcing available subjects for essays in the Hart Schaffner & Marx prize competition for 1918 may be had of Professor J. Laurence Laughlin, University of Chicago.

Many readers of the *Review* may be interested in a *Special Bulletin* published by the Chamber of Commerce of the United States of America (Riggs Bldg., Washington, D. C.). The issues are prepared by the Committee on Statistics and Standards, of which Mr. A. W. Douglas of St. Louis is chairman, and make reports on the condition of crops.

A bulletin of the Russell Sage Foundation Library for June, 1917, contains several pages descriptive of the library collections in New York City of interest to social workers (pp. 33-42).

Dr. John Franklin Crowell, who recently retired from the Executive Office of the New York Chamber of Commerce, is engaged in the preparation of a volume on the *Internal Commerce of the United States*.

Dr. Frank G. Stockton, of the University of Indiana, is conducting an investigation of retail and wholesale public markets, coöperative delivery systems, and municipal trading, the results of which will soon be published in bulletin form.

The Eleventh Annual Report of the President and of the Treasurer of the Carnegie Foundation for Teaching, 1916 (576 Fifth Ave., New

York, pp. 172) is devoted to further discussion of the subject of insurance and annuities for teachers and contains the replies of the associated institutions to the proposals made by the Carnegie Institution during the previous year.

Mr. Napoleon Wagner (1101 Emerson St., Denver, Colorado) will be glad to furnish gratis to the members of the American Economic Association copies of his pamphlets on taxation. The titles are as follows: *The Plan of Utility, Based on Intrinsic Gold Value* (pp. 26); *The Plan of Utility versus the Somers System of Taxation* (pp. 44).

The Fabian Research Department (25 Tothill St., Westminster, London, S. W.) is making an inquiry into the present position of trade unionism and its development during the last twenty-five years.

The Department of Commerce has issued the fifteenth edition of the *List of Publications of the Department of Commerce Available for Distribution* (Washington, May 8, 1917, pp. 77).

The Library of Congress has prepared a pamphlet on *The United States at War: Organizations and Literature* (pp. 115), compiled under the direction of Herman H. B. Meyer. This contains a list of several voluntary organizations which have been brought into existence in order to assist the government in the present emergency and adds brief descriptive notes in regard to the activities of these organizations. Many bibliographical references are included.

B. F. Bowen and Company (711 Occidental Building, Indianapolis) announce a compilation and publication of *Important Federal Laws* (price, \$6), prepared by John A. Lapp, director of the Indiana Bureau of Legislative Information. Among the acts included are: the Federal Reserve Act, Farm Loan Act, National Banking Act, Interstate Commerce Act, Anti-trust Act, Warehouse Act, Cotton Futures Act, Income Tax, Corporation Tax, Inheritance Tax, Tariff Law, Child Labor Law, Employers' Liability Acts, and Eight-Hour Law.

Houghton Mifflin Company announce *The Theory and Practice of Scientific Management*, by C. Bertrand Thompson, price \$1.75.

The Macmillan Company announces the following books: *The Foundations of National Prosperity: Studies in the Conservation of Permanent National Resources*, by Professors R. T. Ely, R. H. Hess, C. K. Leith, and T. N. Carver; *The Food Problem*, by Vernon L. Kellogg, in Our National Problems Series; *History of Labor in the United States*, by Professor Commons with the following collaborators, John B. Au-

draws, Helen L. Sumner, H. E. Hoagland, Selig Perlman, David J. Saposs, E. B. Mittelman, and an introduction by Professor Henry W. Farnam.

Longmans, Green & Co. announce a new edition of *English Farming, Past and Present*, by Rowland E. Prothero, president of the Board of Agriculture of Great Britain. The first edition of this book was published in 1912.

Since the preparation of the lists of new books the following have been received:

Longmans, Green: *Economic and Social History of Chowan County, North Carolina, 1880-1915*, by W. Scott Boyce; *Collective Bargaining in the Lithographic Industry*, by H. E. Hoagland; *Separation of State and Local Revenues in the United States*, by Mabel Newcomer.

Macmillan: *The Value of Money*, by B. M. Anderson; *Workmen's Compensation*, by J. E. Rhodes, 2d.

Houghton Mifflin: *Introduction to Rural Sociology*, by Paul L. Vogt.

Filson Club: *The Kentucky River Navigation*, by Mary Verhoeff.

Putnams: *The Margin of Happiness*, by Thetta Quay Franks.

Harvard University Press: *Business Statistics*, by Melvin T. Cope-land; *Municipal Ownership*, by Carl D. Thompson.

Alexander Hamilton Institute: *The Exchanges and Speculation*, by Albert W. Atwood; *Investment*, by E. D. Jones; *Cost Finding*, by D. S. Kimball; *Domestic and Foreign Exchange*, by E. L. Stewart Patterson.

The American Association for Labor Legislation has issued two numbers (April and June) of a Special Bulletin on *Labor Laws in War Time*. In No. 1 appears in full the public announcement of the executive committee issued March 23, when war appeared imminent, outlining the essential minimum requirements that should be maintained for the protection of those who serve the industries in this emergency, in order to increase production and to conserve human resources. No. 2 reports encouraging gains in the campaign to uphold existing labor standards, and suggests further measures necessary for adequate and proper mobilization of the industrial army.

In the July issue of *Equity* (1520 Chestnut St., Philadelphia, p. 129) are given the results of a referendum vote among the economists and sociologists of the country as to the best method of financing the war. Of the 1017 replies received, 853 voted in favor of making large incomes largely responsible for meeting the expenses of the war; 164

voted positively against the principle of conscription of income for war finance. For income conscription exclusively there were 415; and against, 562. Taxation of incomes of \$1,000 was favored by 605.

Readers of the REVIEW may be interested in *The Industrial News Survey*, a weekly published by the National Industrial Conference Board, which is composed of sixteen national associations of employers in the United States. This weekly condenses in a precise and accurate form the principal items of news affecting industry. Persons wishing sample copies are advised to write to Mr. Magnus W. Alexander, executive secretary, 15 Beacon St., Boston.

The Virginia State Negro Business League has begun the publication of a semi-annual *Bulletin* devoted to the negro's potential importance in business (711 Highland Ave., Norfolk, Va.).

The last number of the *Bulletin of the International Labour Office* (Vol. XI, Nos. 3-5), delayed by war conditions, has just been distributed in America by the American Association for Labor Legislation.

The July issue of the *Bankers' Magazine* (London) contains a letter of congratulation to Sir Inglis Palgrave upon his ninetieth birthday, signed by the leading economists of England.

The *Gazette de Lausanne* for July 9, 1917, contains an account of the ceremonies held to celebrate Professor Vilfredo Pareto's completion of twenty-five years of distinguished service as professor of political economy in the faculty of law of the University of Lausanne. A number of universities in other countries sent representatives, including Professors M. Pantaleoni, of Rome; Emile Bouvier, of Lyons; and Charles Gide, of Paris. Representatives were also present from the universities of Grenoble, Bordeaux, and Montpellier.

Appointments and Resignations

Professor Walter M. Adrianee has been granted leave of absence from Princeton University for the first half of the coming year and will be engaged in statistical work in Washington.

Professor W. G. Beach has resigned his position as head of the department of sociology at the University of Washington, Seattle, to become dean of the School of Liberal Arts and head of the department of economics and history at Washington State College, Pullman.

Dr. Abraham Berglund has been promoted to the rank of associate professor of economics at the University of Washington, Seattle.

Mr. Ralph H. Blanchard has been appointed instructor in economics and insurance in the School of Business at Columbia University.

Mr. Bruce Bliven, formerly head of the department of journalism in the University of Southern California, has been appointed lecturer on retail advertising at the New York University School of Commerce, Accounts, and Finance.

Dr. Harriet Bradley has been appointed assistant professor of economics in Vassar College.

Professor H. A. E. Chandler has been acting as expert advisor to the government of Mexico in tax reform.

Dr. Frederick A. Cleveland has resigned his position as director of the New York Bureau of Municipal Research and has taken an executive position with the Industrial Service and Equipment Company, which serves as a central staff to the corporations owned by the Willett-Sears Company. Mr. Cleveland will have his residence in Boston.

Dr. Wilson Compton, formerly instructor in economics at Dartmouth College, is now with the Federal Trade Commission and is in charge of the investigations of the lumber and oil industries.

Mr. Paul D. Converse, instructor in commerce at the School of Economics of the University of Pittsburgh, has been granted a year's leave of absence.

Professor Melvin T. Copeland, of Harvard University, is serving as secretary of the Commercial Economy Board of the Council of National Defense at Washington.

Mr. John L. Dohr has been appointed instructor in accounting in the School of Business at Columbia University.

Assistant Professor W. W. Douglas has been made professor of accounting at the New York University School of Commerce, Accounts, and Finance.

Professor Charles A. Ellwood, of the University of Missouri, has been teaching sociology at the summer session of the University of Colorado.

Mr. J. Anderson Fitzgerald has been promoted from assistant professor to associate professor of commerce in the College of Commerce of Toledo University. During the summer he served as statistician of the city division of health of Toledo.

Mr. L. G. Foster, has been appointed field agent in marketing at Ames, Iowa, in coöperation with the Office of Markets and Rural Organization at Washington.

Professor W. F. Gephart, of Washington University, has resigned his position as special expert in the Office of Markets at Washington in order to undertake a study for the Carnegie Foundation on the effect of war on insurance.

Dr. R. C. Haig has been acting as expert advisor to the government of Saskatchewan in tax reform for the summer of 1917.

Mr. Hudson B. Hastings, professor of applied economics at Reed College, has been teaching in the summer school of the University of California.

Mr. F. C. Henderschott, manager of the New York Edison Company, has been appointed lecturer on corporation schools at the New York University School of Commerce, Accounts, and Finance. He will offer a course the purpose of which is to train executives for educational work in corporations.

Professor G. B. Hendricks, formerly head of the finance and banking department of the Utah Agricultural College, has been appointed director of the School of Commerce and Business Administration at the Utah Agricultural College.

Dr. A. N. Holcombe, absent on leave from Harvard University, has been appointed associate professor of political science at Leland Stanford Junior University for one year.

Dr. Stanley E. Howard, of Princeton University, has been appointed instructor in economics at Dartmouth College.

Professor A. S. Johnson has leave of absence for the year from Leland Stanford Junior University and continues his work on *The New Republic*.

Dr. Eliot Jones, formerly of the University of Texas and now examiner in the Federal Trade Commission, has been appointed associate professor of economics in Leland Stanford Junior University.

Mr. John S. Kier, of the Wharton School at the University of Pennsylvania, will take the place of Mr. Paul D. Converse as instructor in commerce at the School of Economics of the University of Pittsburgh for the year.

Mr. Lewis Lilly has been appointed assistant professor of accounting and finance at the University of Washington.

Assistant Professor John T. Madden has been made full professor of accounting and head of the department of accounting at the New York University School of Commerce, Accounts, and Finance.

Mr. Thomas A. Mason, has been granted a year's leave of absence from the department of sociology at the University of Washington, Seattle, and will spend the year in study at New York City.

Assistant Professor Stephen I. Miller, Jr., of Leland Stanford Junior University, has been appointed professor of transportation in the University of Washington. During the summer, Professor Miller has given courses in the University of California.

Dr. Mabel Newcomer has been appointed instructor in economics in Vassar College.

Mr. William Fielding Ogburn, formerly professor of sociology and economics at Reed College, has been appointed professor of sociology and head of the department of sociology at the University of Washington, Seattle. Dr. Ogburn gave courses in sociology at the summer session of the University of Washington.

Mr. Carlton H. Parker, who has been assistant professor of economics at the University of California, has been appointed head of the department of economics and commerce and dean of the School of Commerce at the University of Washington, Seattle.

Dr. Edward E. Pratt has resigned his position as chief of the Bureau of Foreign and Domestic Commerce.

Mr. Jesse H. Riddle has been appointed instructor in economics at Dartmouth College.

Mr. Charles F. Rittenhouse, who has been associate professor of accounting at Simmons College, has been appointed professor of accounting and head of the accounting department of the College of Business Administration of Boston University.

Dr. Frank R. Rutter has been appointed commercial attaché at Tokyo, Japan.

Mr. J. M. Shortliffe, instructor in economics at Dartmouth College, has been promoted to an assistant professorship.

Professor G. A. Stephens, of the University of Nebraska, has received leave of absence in order that he may take part in the food investigation being conducted by the Federal Trade Commission.

Dr. George Thomas, formerly director of the School of Commerce

and Business Administration of the Utah Agricultural College, has been appointed treasurer of the Federal Land Bank at Berkeley, California.

Mr. Rex Tugwell, of the University of Pennsylvania, has been appointed assistant professor of marketing at the University of Washington.

Dr. Francis Tyson, assistant professor of sociology at the School of Economics, University of Pittsburgh, has been made professor of social economy. Dr. Tyson lectured in the summer school of the University of Minnesota.

Dr. T. W. Van Metre has been promoted to an assistant professorship in economics and transportation in the School of Business at Columbia University.

Mr. Leslie Vickers has been appointed an instructor in economics at Columbia University.

Miss Sydnor H. Walker has been appointed assistant in economics at Vassar College.

Professor L. D. H. Weld has resigned his position as professor of business administration at the Sheffield Scientific School, Yale University, to become manager of a new department of commercial research for Swift and Company, Chicago.

Professor John R. Wildman, who was head of the department of accounting at the New York University School of Commerce, Accounts, and Finance, has given up his administrative work in order that he may devote more time to teaching and research.

Mr. A. W. Wright has been promoted from assistant professor to associate professor of political science in the School of Economics, University of Pittsburgh.

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